

## TRANSVAAL MUSEUM

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## NEW SOUTH AFRICAN HETEROCERA

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With plate

THE species described in this paper have been submitted, by the Transvaal Museum or by Mr A. J. T. Janse, for determination together with other interesting material at intervals during the past four or five years and now furnish a very substantial contribution to our knowledge of the fauna of South Africa. The types remain in the collections specified, but we take this opportunity of acknowledging the kindness whereby we have been enabled to keep paratypes and other valuable specimens in this country.

It is unfortunately only possible at present to provide one plate in illustration of the paper, but it is hoped that the rest of the species may be figured on some later occasion.

In some of the descriptions the convenient abbreviations have been adopted with which Mr Meyrick and his followers have familiarised the entomological world, the length of the palpus being expressed in terms of the diameter of the eye, length of antennal ciliation or pectination in terms of the diameter of the shaft, length of tarsus in terms of that of the tibia.

## A. GEOMETRIDAE. By LOUIS B. PROUT

## SUB-FAMILY HEMITHEINAE

1. *Metallochloa dyscheres* sp. nov. (Pl. I, fig. 18).

♂, 26 mm. Face deep red. Palpus short (about 1), 2nd joint with appressed scaling, 3rd joint very small, though distinct; red, the projecting hair-scales beneath 1st joint paler and more ochreous. Tongue probably not long (rolled in). Antenna almost simple, slightly lamellate, the ciliation vestigial; pale ochreous, above slightly tinged with red, towards base more whitish. Crown

green, with very narrow white fillet between the antennae; lower part of head reddish. Thorax above green, beneath whitish. Abdomen above green at base, then pale, red-brown, as far as middle with some blackish irroration; the two anterior crests strong, blackish, glossy. Legs white, the fore leg strongly and the middle moderately mixed with red; hind tibia dilated, with hair-pencil, the sheath projecting slightly over the extreme base of tarsus, the spurs rather short, especially the outer of each pair.

*Fore wing* with termen more curved posteriorly than in most of the group, tornus in consequence less pronounced;  $SC^2$  arising well before  $SC^5$ ,  $R^1$  just separate,  $M^1$  about connate; dull green, like a *Hemiteha*; costal edge narrowly ochreous; fringe green proximally, paler (more white-greyish) distally. *Hind wing* with termen rather straight from apex to  $R^1$ , here bluntly angled, at  $R^3$  still more bluntly (scarcely appreciably) angled, not excised between the angles;  $R^1$  and  $R^3$  both very shortly stalked; dull green; fringe as on fore wing.

Portuguese East Africa: Magude, October 1918 (C. J. Swierstra). Type in coll. Transvaal Museum.

By the shape, the antenna, and even the palpus, probably more of a *Pseudhemiteha* than a *Metallochloa*, but the hind tibial armature should have more weight in the present system of classification.

### 2. *Androzeugma* (?) *mollior* sp. nov.

♂, ♀, 22–25 mm. Similar to *Neromia rubripunctilla* Prout, differing as follows.

Build rather more delicate. Frenulum of ♂ wanting. Abdomen dorsally green, entirely without the whitish ridge. Face slightly more orange.

*Fore wing* with costal margin slightly more arched; the irroration finer, so that the insect looks almost smooth green to the naked eye; no cell-dot<sup>1</sup>; the weak whitish lines slightly crenulate, the antemedian rather more oblique, in the type rather near the postmedian at hind margin, but individually variable. *Hind wing* with termen more regularly rounded; ground-colour and postmedian line correspondingly differentiated; no cell-dot.

Rhodesia: Umtali (A. J. T. Janse), 5 January 1918, type ♂ in coll. Janse; 11 January 1918, allotype ♀ in coll. L. B. Prout.

Differ from typical *Androzeugma* in having  $SC^1$  of the fore wing arising from the cell;  $C$  of hind wing scarcely anastomosing in either sex. Palpus in both sexes rather shorter than in the type species; the wings of a less translucent green.

### 3. *Neromia rhodomadia* sp. nov.

♂, 24 mm. Face red. Crown broadly white, with a red line behind. Palpus about 1; whitish, marked with red on outer side. Tongue developed. Antenna lamellate. Thorax above green, beneath white. Abdomen above mixed with red (at base with red and black), on sides and beneath white; a subdorsal white patch on 2nd somite and white dorsal crests on 2nd–4th.

*Fore wing* rather narrow, termen oblique, straightish to  $M$ , then more oblique, slightly waved;  $SC^1$  free,  $R^1$  connate or just stalked,  $DC^3$  strongly oblique posteriorly,  $M^1$  separate; yellowish green; costal edge narrowly white, with a large patch of red and black scales at base and a few red scales beyond; lines obsolete; a minute red cell-dot; terminal red, black-irrorated markings, consisting of a slightly interrupted line, which continues round the apex, a small, proximally roundish edged mark from  $R^1$  to behind  $R^2$ , enclosing a pair of white spots which are divided by a line on  $R^2$ , and a larger, roundish,

<sup>1</sup> But this is also occasionally obsolete in aberrations of *N. rubripunctilla*.

somewhat pale-centred ternal patch; fringe white, irrorated with red, the vein-ends with black-mixed spots. *Hind wing* rather narrow;  $M^1$  approximated to  $R^3$ ; yellowish green; costal margin concolorous; abdominal margin narrowly and rather irregularly red, the fringe proximally white; cell-dot extremely minute; terminal markings corresponding to those of fore wing, but the blotches much reduced, the ternal white-centred.

Underside paler, with the markings indistinctly showing through.

Portuguese East Africa: Lorenzo Marquez (A. S. Moreira), type in coll. Janse; Catembe, near Lorenzo Marquez (Habenicht), paratype in coll. Transvaal Museum.

#### 4. *Chlorocoma eucela* sp. nov.

♂, 21 mm. Face red (abraded in middle). Palpus short and rather slender (not quite 1), reddish, narrowly pale beneath. Vertex narrowly white. Occiput green. Antennal shaft white, spotted with red; pectinations rather long (5 or 6), tinged with ochreous. Body above green, at anal end white; beneath white. Legs red above and on inner side, white beneath; hind tibia dilated with white hair-pencil and white terminal process, reaching to middle of 1st tarsal joint; hind tarsus abbreviated.

*Fore wing* with  $SC^1$  anastomosing slightly with  $C$ ,  $R^1$  not stalked,  $DC^3$  very oblique posteriorly,  $M^1$  connate; colour of *didita* Walk., pale green, minutely and evenly irrorated with deeper green, appearing to the naked eye almost smooth and uniform; costal margin narrowly ochreous, in places (especially near base) with a slight reddish tinge; cell-dot very vaguely indicated in darker green, entirely without the black scales of *didita*. *Hind wing* with termen rounded,  $SC^2$  moderately stalked,  $DC^3$  rather strongly oblique,  $M^1$  very shortly stalked; as fore wing except costally, the costal fringe whitish.

Underside similar but paler, the costal margin of the fore wing more strongly reddened in proximal half.

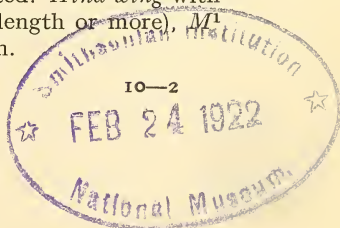
Pretoria, 12 October 1917 (A. J. T. Janse). Type in coll. Janse.

Might easily be passed over for a small *Prasinocyma scissaria* Feld., but the narrower fore wing and the short palpus warrant its being considered provisionally congeneric with *didita*, in spite of the dilated hind tibia. It lacks the white strigulation of the *scissaria* group, has the pectinations (especially the inner series) longer than in the species named, the face and legs brighter red; *P. tranquilla* Prout (*Nov. Zool.* xxiv. 428) has the hind tibia undilated, the face and legs of a more nondescript colour, the wings rather lighter (less irrorate); *degenerata* Prout has them less bluish, more opaque, the termen of the fore wing less oblique, the face and legs less bright.

#### 5. *Chlorocoma clopia* sp. nov. (Pl. I, fig. 1).

♂, 24 mm.; ♀, 28 mm. Close to the preceding, but still more similar superficially to *Pras. scissaria*, the wings being a little broader and with very fine whitish strigulae. Face red, as in *eucela*. Palpus more broadly whitish ochreous beneath (in ♀ scarcely longer than in ♂, with 3rd joint very small). Antennal shaft not red-spotted, the ♂ pectinations paler, perhaps scarcely so long. Legs less deep red, the hinder pair almost entirely white.

*Fore wing* with  $C$  more widely separate from the stalk of  $SC^{2-5}$ ,  $SC^1$  sometimes (type) free (shortly anastomosing with  $C$  in the other two),  $R^1$  stalked,  $DC^3$  inbent anteriorly,  $M^1$  sometimes (♀) stalked; slightly more bluish green; costal edge paler, at base whitish; cell-dot scarcely indicated. *Hind wing* with  $SC^2-R^1$  longer stalked than in *eucela* (for one-half their length or more),  $M^1$  connate (type) or stalked; costal fringe tinged with green.



Pretoria North (C. J. Swierstra), 20 January 1917, type ♂ in coll. Transvaal Museum; 10 January 1917, allotype ♀ in coll. L. B. Prout. Zululand: Tugela, a ♂ in coll. British Museum.

Scarcely distinguishable from *scissaria* except in the shorter palpus; face brighter red; wings slightly bluer green, the strigulation slightly less coarse, hind wing with the abdominal margin a little less elongate,  $SC^2-R^1$  longer stalked; the non-stalking of  $M^1$  certainly and the wider separation of  $C$  from  $SC^2-5$  probably, less constant as distinctions. Anastomosis of  $SC^1$  of fore wing with  $C$  is rare in *scissaria*, occurring in less than 20 per cent. of a large number examined.

#### 6. *Prosomphax*<sup>1</sup> *deuterurga* sp. nov.

♂, 33 mm. Face red. Palpus with 3rd joint slender, reaching just beyond frons; ochreous whitish, mixed with red. Vertex green, very narrowly white in front. Antennal shaft white, more ochreous distally; pectinations about 3-4, ochreous. Thorax green, paler beneath. Abdomen anteriorly green above, otherwise white with slight greenish admixture. Fore leg mostly red. (Middle pair lost.) Hind femur and tibia mixed with red.

*Fore wing* with  $R^2$  arising close to the stalk of  $SC^2-R^1$ ; green, paler than in *callista* Warr., the silvery irroration and strigulation smaller and sparser, scarcely noticeable; costal edge narrowly tinged with fleshy ochreous; fringe pale green, tipped with whitish. *Hind wing* with  $M^1$  connate or barely stalked; whitish, becoming tinged with green at termen.

Both wings beneath pale green anteriorly, becoming whitish posteriorly.

Natal: Krantzklouf, 28 July 1916 (L. Hargreaves). Type in coll. Janse.

#### 7. *Syndromodes oedocnemis* sp. nov.

♂, ♀, 26-28 mm. Face nondescript dull reddish (dull red mixed with green). Palpus pale, slightly irrorated with red on outer side; 3rd joint distinct, dull reddish above. Vertex white; occiput narrowly green. Antennal pectinations in ♂ slightly longer than in *invenusta* Wllgrn. Thorax and abdomen above green, beneath whitish; anal tuft whitish. Fore and middle legs mostly red on upper and inner sides, brightest on fore coxa; hind tibia of ♂ swollen almost as in *Hemidromodes*, all the spurs well developed, the terminal pair less long than the proximal.

*Fore wing* with  $SC^1$  anastomosing with  $C$  (costal end of  $C$  in the ♂ type weak or perhaps obsolete),  $SC^2$  long-stalked, arising just before  $SC^5$ ; bright green, as in *invenusta*, with minute white irroration hardly discernible without the lens; costal edge whitish buff; lines fine, whitish, faint anteriorly; ante-median from before one-third costa to about one-third hind margin, faint, gently curved, slightly indented behind  $M$  and behind  $SM^2$ ; postmedian nearly parallel with termen, just over 3 mm. therefrom, very slightly incurved behind  $M^2$ ; fringe white, distally less pure, in some lights suggesting a slight tinge of pink. *Hind wing* with  $C$  anastomosing to about middle of cell,  $M^1$  about connate or slightly stalked; first line wanting; postmedian reaching costa, about 4 mm. from termen, curved, very slightly incurved behind  $M^2$ ; fringe as on fore wing.

<sup>1</sup> Warren was mistaken in diagnosing *Prosomphax* as having terminal spurs only; I have now seen his type species and it has all the spurs of the hind tibia developed, both pairs as usual unequal. The genus scarcely differs from some pectinate *Omphax* except in having the palpus less minute (at least 1) and  $C$  of hind wing approximated to about middle of cell; from *Chlorocoma* it differs in the last-named character, as well as in the elongate costa of the hind wing (and superficially in the white colour thereof), the extreme position of  $R^2$  of fore wing and other slight characters.

Underside whitish green, unmarked; costal edge and fringes nearly as above.

Rhodesia (A. J. T. Janse): Hope Fountain, 16 January 1918, type ♂ in coll. Janse; Shangani, October 1918, allotype ♀ in coll. L. B. Prout.

The ♀ has the fore wing very slightly less broad, but with the costal margin more regularly curved. The legs are unfortunately lost and it is possible the species may have to be transferred to *Hemidromodes*. If not, it forms a new section of *Syndromodes*, by the dilated ♂ hind tibia. In any case it is distinguishable from *invenusta* by the duller face and more distinct lines, from *cellulata* by the much duller face, less bluish ground-colour and absence of white cell-marks. The anastomosis of *C* of the hind wing is rather less long than in typical *Syndromodes*, but this varies in *dimensa* and in *Hemidromodes*.

#### MICTOSCHEMA gen. nov.

Face smooth. Palpus moderate, heavily scaled, 3rd joint in ♂ small, in ♀ somewhat longer. Tongue wanting or vestigial. Antenna rather short; in ♂ bipectinate, with apical part merely serrate; in ♀ lamellate, with serrate teeth. Pectus and femora slightly hairy. Metathorax and abdomen crested. Hind tibia not dilated, with four approximated spurs. Wings densely scaled. Frenulum in both sexes wanting. Fore wing with costa between the slightly convex basal and distal parts straight or almost concave, termen faintly waved, rather strongly oblique, straightish between  $SC^5$  and  $M^1$ , tornus not strong; cell well under one-half, *DC* incurved, oblique posteriorly,  $SC^1$  from cell, anastomosing with *C*,  $SC^2$  from stalk of  $SC^{3-5*}$ ,  $R^1$  stalked,  $R^2$  very characteristic,  $M^1$  just separate. Hind wing with costa not long, apex rounded, termen nearly as in fore wing, abdominal margin elongate; cell less than one-half, *DC* oblique posteriorly, *C* anastomosing with *SC* at a point near base, rapidly diverging,  $SC^2$  separate,  $R^2$  very characteristic,  $M^1$  shortly stalked.

Type: *MICTOSCHEMA SWIERSTRAI* sp. nov.

A most interesting genus, suggesting a real blood-relationship with *Mimandria*, in which the frenulum is fully developed, thorax not crested, etc., and—considered in conjunction with the following species of *Holoterpna* (?)—a possible clue to the origin of some of the obscure specialised genera such as *Cacochloris* and *Holoterpna*.

#### 8. *Mictoschema swierstrai* sp. nov. (Pl. I, fig. 11).

♂, 30–31 mm.; ♀, 41 mm. Face black. Palpus pale grey, 2nd joint mixed with black on outer side, 3rd joint mostly black above. Vertex pale grey, in middle mixed with red-brown. Antennal shaft blackish proximally, grey distally. Thorax and abdomen pale grey, the crests mixed with brown. Legs grey, in part blackened on inner side.

*Fove wing* pale grey with a slight admixture of brown and with blackish irroration; some irregular blackish marks at base; lines fine, black, slightly pale-edged on their remote sides; antemedian at one-third, slightly excurved in middle, in ♂ scarcely sinuate, in ♀ angled inward on median vein, excurved behind it; cell-dot moderate, black, conspicuous; postmedian from five-sevenths costa, sinuous throughout, with a deep inward curve between  $SC^5$  and  $R^3$ , markedly oblique inward from  $M^1$  to fold, reaching hind margin little beyond middle; traces of a whitish subterminal, following the same course as the postmedian; terminal line black, not interrupted; fringe whitish at base, then

\* In the type ♂ its base appears to have migrated and to arise from  $SC^1$ .

dark grey, tips paler grey. *Hind wing* concolorous, the cell-mark rather large, long-oval, with whitish centre; basal and antemedian markings wanting, the rest as on fore wing.

Both wings beneath whitish grey, with very fine grey irroration; cell-spots black, on fore wing rather larger than above, on hind wing less pale-centred; fore wing with an ill-defined, rather broad, smoky submarginal band from costa, not reaching tornus; hind wing (especially in the ♀) with traces of similar band, but fainter and shorter.

Pretoria North (C. J. Swierstra): 20 March 1917, type ♂, 12 March 1917, allotype ♀, both in coll. Transvaal Museum; 29 January 1917, paratype ♂ in coll. L. B. Prout.

9. *Holoterpna* (?) *errata* sp. nov.

♂, 26 mm. Face black. Palpus moderate, black. Vertex, thorax and abdomen concolorous with wings. Fore and middle legs partly blackened on inner side.

*Fore wing* shaped nearly as in *pruinosa* Stdgr., but with the termen slightly more rounded;  $SC^1$  anastomosing moderately with  $C$  and then at a point with the stalk of the other subcostals,  $SC^5$  arising before  $SC^2$ ,  $SC^{3-4}$  coincident or separating close to apex,  $R^1$  shortly stalked; whitish grey, with rather uniform dark irroration; lines fine, dark, not strong; antemedian at one-third, faintly excurved and with very slight indentations at  $M$  and  $SM^2$ , sometimes with some dark shading proximally; cell-spot rather elongate, not very sharp; postmedian from before three-fourths costa to about two-thirds hind margin, lunulate-dentate, gently incurved between  $SC^5$  and  $R^3$  and between  $M^1$  and  $SM^2$ , the outward teeth at  $R^3$  and  $M^1$  rather sharper than the rest; a weak dark shade between the postmedian and subterminal; subterminal whitish, nearly parallel with postmedian, not sharply defined distally; terminal line fine, interrupted at the veins, somewhat thickened midway between; fringe nearly concolorous. *Hind wing* shaped somewhat as in *pruinosa* but rather less extreme (termen rather more rounded); cell-mark and markings beyond corresponding to those of fore wing.

Fore wing beneath narrowly pale at termen and more broadly at hind margin, otherwise somewhat suffused; cell-mark and outer band discernible. Hind wing beneath mostly pale, with traces of dark cell-mark and of slight subapical clouding.

Rhodesia: Sawmills (A. J. T. Janse), 2 February 1918, type in coll. Janse; 3 February 1918, paratype in coll. L. B. Prout.

10. *Acidaliastis prophanes* sp. nov.

♀, 16 mm. Head and body whitish; collar and front of thorax a little yellower. Antenna not bipectinate, merely a little serrate.

*Fore wing* white, with a slight tinge of buff, especially along costal margin; lines strong, thickest in anterior part; antemedian from one-third costa to two-fifths hind margin, black-brown, slightly angulated inward on  $M$  and outward on fold; postmedian from three-fourths costa to hind margin near tornus, lunulate inward between the radials and between  $M^2$  and  $SM^2$ , very slightly dentate outward on  $SC^5$ ,  $R^1$ ,  $R^3$  and  $M^1$  and outbent on  $SM^2$ ; no terminal line; fringe concolorous, at extreme apex brown-black. *Hind wing* yellowest at distal margin; postmedian line alone present, placed at about two-thirds, formed nearly as on fore wing but oblique inward costally.

Fore wing beneath slightly more suffused, except behind cell and in distal area; postmedian line present, rather diffuse, obsolescent posteriorly; fringe as above. Hind wing nearly as above, the line slightly more diffuse.

Zululand: Nkwaleni, 12 January 1916 (A. J. T. Janse). Type in coll. Janse.

A pair from Magude, Portuguese East Africa, November 1918 (C. J. Swierstra), subsequently submitted to me by the Transvaal Museum, should be mentioned here. The ♀ quite agrees with the type. The ♂ agrees structurally, but looks very different, being brownish drab, with very fine pale edgings to the slightly darker central area; antennal joints few and long, pectinations four or five times as long as diameter of shaft; hind tibia slender.

#### SUB-FAMILY STERRHINAE

##### 11. *Somatina sedata* sp. nov.

♀, 33 mm. Face narrowly black above, white spotted with reddish below. Palpus reddish on outer side, white beneath. Vertex blackish red. Thorax and abdomen white. Fore leg marked with reddish, except on tarsus.

*Fore wing* with areole double,  $SC^2$  from cell; shining white, with scattered black-grey irroration (scarcely noticeable without lens); distal end of costa with a very fine red line, which thickens at apex into a dash in front of  $SC^4$ ; lines light grey; antemedian slender and weak, scarcely traceable anteriorly to cell-fold, here within 2 mm. of the discal dot, slightly excurved, about submedian fold very slightly inbent; discal dot minute but sharp, black; median line slightly stronger than antemedian, arising about  $SC^4$  at 4 mm. from termen, slightly more oblique than termen and almost inappreciably incurved in its posterior part; postmedian again slightly stronger, a little more wavy, parallel with termen, arising at  $SC^4$  2.5 mm. from termen; two very fine subterminal lines, the outer slightly the stronger, appreciably dentate outward between the veins; terminal line slight, but with minute (anteriorly larger) black dots at the vein-ends; fringe white, traversed by a little dusting which suggests a fragmentary line. *Hind wing* similar, without first line and cell-dot; median line from mid costa to beyond middle of abdominal margin, crossing hind angle of cell.

Underside white, unmarked, the red line at end of costa reproduced; terminal dots present, but weaker than above (brownish).

Natal: Umkomaas (A. J. T. Janse), 26 December 1915, type in coll. Janse, 24 December 1914, paratype in coll. L. B. Prout.

##### 12. *Discomiosis arcioentra* sp. nov.

♂, 22 mm. Face and palpus black. Vertex and antennal shaft very pale brown. Antennal pectinations quite rudimentary, fascicles of cilia strong. Collar more ochreous brown. Thorax and abdomen pale brown, with a little dark irroration; the abdomen also with dark dorsal belts; the first three and the last strong, blackish, the others more feeble. Hind tibia moderately dilated, with one proximal and two terminal spurs.

*Fore wing* pale brown, with warmer brown irroration and scattered blackish scales; costal edge darkened proximally; 1st line blackish, thickest anteriorly, rather strongly oblique outward from one-third costa, then oblique inward and very slightly sinuous; median shade ill-defined, thick costally, then very oblique outward, acutely angled behind  $SC^5$ , then oblique inward, with a deep inward bend between  $M^1$  and  $SM^2$ , thus nearly approaching the antemedian; postmedian blackish, thickest at costal end, from  $R^1$  onward accentuated by black dots on the veins, rather oblique inward from three-fourths costa to  $SC^5$ , very oblique outward to  $R^1$ , slightly incurved between the radials and in submedian area; a strong black cell-dot; some weak dark dusting in terminal area between the veins; termen with conspicuous black interneural dots;

fringe feebly and irregularly dark-spotted. *Hind wing* with a strong dark inner-marginal spot near base; median shade strong, proximal to the black cell-dot; postmedian line similarly formed to that of fore wing, subterminal shading stronger; terminal dots and fringe as on fore wing.

Underside more weakly marked, the hind wing paler; fore wing with antemedian and median lines obsolete, the proximal part of the wing (especially in cell) being suffused with dark grey.

Zululand: Eshowe, 6 January 1916 (A. J. T. Janse). Type in coll. Janse. Cape: Grahamstown, a worn ♂ in coll. Joicey.

I have already (*Nov. Zool.* xxii. 326) referred the ♀♀ provisionally to *crensatifera* Warr. (*Nov. Zool.* ix. 504), which has different ♂ leg-structure.

### 13. *Scopula pellowiodes* sp. nov.

♂, 25 mm. Head and body fawn-colour, more ochreous beneath. Antenna with moderately long (3-4), strong, well-separated pectinations. Hind tibia slender, without spurs; hind tarsus not shortened.

*Fore wing* not very broad, termen only very gently curved; fawn-colour, rather smoothly scaled; a moderately sharp black cell-dot; lines greyish, not very distinct; antemedian obsolete; median shade little thickened, scarcely curved, placed just beyond the cell-dot; postmedian line slender, slightly nearer to cell-dot than to termen, nearly parallel with latter but slightly sinuous; proximal subterminal shade present, slightly approaching postmedian line on middle of wing; distal subterminal absent; subterminal line very feeble, slightly strengthened midway between the veins; fringe fairly long, concolorous. *Hind wing* rather long in proportion to its width, termen smooth; appreciably more ochreous-tinged than fore wing; median and postmedian lines of fore wing feebly continued and subterminal shade still more feebly.

Underside slightly more ochreous, paler on the hind than on the fore wing; cell-dot and postmedian line indicated.

Orange River Colony: Harrismith, 1 January 1916. Type in coll. Janse.

I do not know of any *Scopula* with which this may well be compared; the coloration recalls *Rhodostrophia inconspicua* Butl., though slightly duller.

### 14. *Scopula molaris* sp. nov.

♀, 23 mm. Head and body whitish with a tinge of buff and with fine and sparse dark irroration. Frons slightly prominent, on its outer side dull clay-colour. Palpus about  $1\frac{1}{2}$ , rather stout, 2nd and 3rd joints mostly dull clay-colour, the latter white at tip. Antenna with slight bristles. A clay-coloured spot on side of head and neck. Legs tinged with the same, especially proximally.

*Fore wing* with costa slightly arched, especially posteriorly, apex rather acute, termen oblique, almost straight anteriorly, slightly curved behind middle; areole moderate,  $SC^1$  shortly stalked with  $SC^{2-5}$ ; cream-buff, with fine but copious dark irroration; lines grey, rather slender; antemedian not strong, from one-third hind margin, parallel with termen to middle of cell near cell-dot, then recurved but obsolescent; cell-dot minute, blackish; median shade fine, beyond middle, extremely gently incurved, closely approaching the cell-dot; postmedian rather more sharply expressed, between  $R^2$  and  $M^2$  parallel with termen, posteriorly curving very slightly towards it, in front of  $R^2$  making a more noticeable outward curve, costally obsolescent; space between postmedian and subterminal grey-shaded; subterminal pale, moderately thick, proximally crenulate; a narrower pale line at termen; terminal line not very strong, broken into dots and dashes; fringe irrorated with grey, two or



three traversing lines very faintly suggested, tips whiter. *Hind wing* with costal margin rather long, apex and anterior part of termen well rounded, posterior part straightish; whitish, tinged with buff, towards termen slightly more buff; median and postmedian lines and subterminal shade present at abdominal margin, fading out anteriorly; terminal line obsolete at apex, otherwise consisting of grey interneural dashes.

Both wings beneath nearly as fore wing above; cell-dots present (on hind wing weak); median and postmedian lines complete, on fore wing bent about  $SC^5$ , on hind wing (the median strongly) about  $R^1$ .

Rhodesia: Sawmills, 5 February 1918 (A. J. T. Janse). Type in coll. Janse.

Evidently related to *phyletis* Prout (*Ann. Transv. Mus.* III. 197), perhaps a form of it. Rather larger, possibly longer-winged, less pale (especially on underside), but with head, face and front of thorax whiter; cell-dot minuter.

15. *Scopula impicta* sp. nov. (Pl. I, fig. 9).

♂, ♀, 20–22 mm. Face brown, with variable blackish admixture. Palpus white beneath. Antenna in ♂ with rather long ciliation. Vertex white. Collar light brown, tending towards ochreous. Thorax and abdomen mostly white. Legs tinged with brown; hind tibia in ♂ with well-developed pair of terminal spurs, tarsus rather long.

Wings shaped as in *picta* Warr. and *fulvilinea* Warr. *Fore wing* white, with a faint tinge of brownish and with very sparse and very minute dark irroration (observable only with the lens); lines fine, light-brown, usually more or less weak, approximately parallel with termen, antemedian and median usually obsolescent anteriorly, the latter crossing, or placed just beyond, the sharp black cell-dot, sometimes a little thickened, costally (when developed) slightly curved baseward; postmedian slightly greyer, minutely denticulate outward on the veins, somewhat incurved about the fold, placed rather near the proximal subterminal, often rather noticeably thickened at costa, where it tends to bend slightly proximal; subterminal white line slightly lunulate, placed between light-brown shades, of which the proximal is well developed and usually rather broad; termen with distinct, slightly elongate black dots or marks between the veins; fringe proximally tinged with brown, distally paler, some dark irroration on the middle making a suggestion of a dividing line. *Hind wing* slightly cleaner whitish, on an average more weakly marked, first line wanting, median just proximal to the sharp black cell-dot; termen and fringe as on fore wing.

Underside with similar or weaker markings distally to the black cell-dot; fore wing proximally in costal region and cell with some slight or moderate smoky suffusion.

Pretoria, 25–27 November, 1911, two ♂♂, 17 October 1911, ♀ (Capt. Paget). Type ♂ in coll. Transvaal Museum.

Several specimens of this species have passed through my hands of recent years and a few are in coll. British Museum. The late Mr Warren proposed, shortly before his death, to publish it under the name of *impicta* in contradistinction to the similar but more brightly marked *picta* Warr. (cp. Janse, *Check-List*, p. 96, No. 1515).

16. *Ptrychopoda laticlavata* sp. nov.

♂, 18 mm. Head dull purple (crimson mixed with black). Palpus very short, more strongly mixed with black. Tongue vestigial. Antenna pale straw-colour, with one or two crimson dots at base; joints slightly projecting, ciliation long (nearly 2). Thorax glossy light straw-yellowish, anteriorly crimson;

abdomen above crimson, beneath yellowish, but largely (variably according to the individual) overlaid with broad blackish belts. Legs pale yellowish, the anterior and middle pairs somewhat marked with crimson on inner side; hind leg short and weak, somewhat hairy, tarsus greatly abbreviated.

Wings narrow, though not so extreme as in *pericalles* Prout (*Ann. Trans. Mus.* III. 201, t. 12, f. 32). *Fore wing* with  $SC^1$  from end of areole,  $SC^5$  shortly stalked; light ochre-yellow, nearly as in *muricata* Hufn. from Europe, or scarcely paler, markings vinaceous as in that species; costal margin vinaceous to near apex, overlaid, to beyond middle, with blackish costal and subcostal streaks, producing to the naked eye the effect of a broad purple streak; base similarly suffused; antemedian line at about one-third, oblique outward from hind margin to cell, bent just before losing itself in the distal streak; median rather variable in position, being in the paratype nearer to the antemedian, slightly angulated outward on  $M$ , slightly incurved behind; postmedian from three-fourths costa to two-thirds hind margin, dentate outward at  $R^1$  and very slightly at  $R^3$  and  $M^1$ , thinnest in middle of wing; a subterminal band, with proximal edge parallel to postmedian, distal edge more irregular, reaching termen at tornus; no terminal line; fringe concolorous. *Hind wing* rather prominent about  $R^3-M^1$ , straight before and behind the prominence; slightly paler than fore wing, at least anteriorly; fine median and postmedian lines discernible, but only strong posteriorly; subterminal band well developed, rather narrower at tornus; some slight vinaceous irroration in terminal area.

Underside with the markings more smoky, on hind wing better developed, the proximal half (or more) of fore wing with strong smoky suffusion.

Rhodesia: Umvuma (A. J. T. Janse), 21 December 1917, type in coll. Janse; 23 December 1917, paratype in coll. L. B. Prout.

17. *Ptychopoda basicostalis* ab. *particolor* ab. nov. (Pl. I, fig. 24).

*Fore wing* with the median area almost entirely darkened with dense dark reddish-grey irroration, leaving slight patches of the ground-colour at costal and hind margins, especially posteriorly. *Hind wing* with basal area as well as the median dark-irrorated.

West Pondoland: Port St John, October 1915 (H. H. Swinney). Type in coll. Transvaal Museum.

Typical *basicostalis* Warr. (*Nov. Zool.* VII. 93) is common in the same locality and reaches northward to the Transvaal.

18. *Ptychopoda controversata* sp. nov.

♂, 28 mm. Face and palpus black. Tongue long. Vertex and antennal shaft pinkish white; cilia about 1. Collar blackish. Thorax and abdomen concolorous with wings, the abdomen with small and weak dorsal spots. Hind tibia not quite as long as femur, moderately dilated, with hair-pencil; tarsus abbreviated (about  $\frac{1}{2}$ ), somewhat thickened proximally, tapering.

*Fore wing* moderately elongate, cell well over  $\frac{1}{2}$ ; pale fleshy grey with reddish ochreous costal margin (coloration of *incarnaria* ab. *ruficostata* Zell., but with scattered black irroration); antemedian line at about one-third, grey, thick and deeply excurved anteriorly, then slender, straightish and obsolescent; median shade weak, excurved just beyond the small black cell-dot, incurved posteriorly; postmedian line from beyond two-thirds costa to four-fifths hind margin, rather strong, especially on the veins, angled outward at  $C$  and  $R^1$ , incurved between, sinuate inward between the radials and between  $M^1$  and  $SM^2$ ; grey shading between postmedian and subterminal as in the *eburnata* group, but feeble; subterminal not defined distally, the wing remaining pale

to the termen; a terminal blackish line, interrupted at the veins; black spots on fringe opposite the veins. *Hind wing* with termen very faintly waved from  $R^1$  hindwards, very slightly more prominent at  $M^1$ ;  $SC^2-R^1$  stalked for well over one-half their length; cell shorter than on fore wing, markings more proximal, antemedian line wanting.

Fore wing beneath with the ochreous costal edge rather broader, otherwise smoky (near base with some black irroration), with only the postmedian and terminal lines developed and these not very strong; spots on fringe weak. Hind wing also somewhat smoky, especially beyond the postmedian line, which is here fairly sharp.

South Rhodesia: Salisbury, 16 September 1917. Type in coll. Janse.

19. *Ptychopoda carneilinea* sp. nov. (Pl. I, fig. 25).

♀, 20 mm. Face and outer side of palpus black. Vertex and antenna white. Thorax and abdomen whitish-brown.

*Fore wing* with apex moderate, termen smooth, oblique, gently curved in middle; brown-whitish with a slight tinge of pink; costa basally rather more brownish; a few scattered black scales; lines flesh pink; 1st obsolete; cell-dot very small, black; beyond it a rather thick, straight median line, slightly more oblique than termen, becoming obsolescent at costa; postmedian about 1.5 mm. from termen, extremely fine, marked with very small black dots on the veins; two subterminal lines, thicker, but not so strong as the median, very feebly lunulate behind middle, otherwise straightish; termen with weak grey line, interrupted at the veins; fringe with minute black dots at base, opposite the veins. *Hind wing* with termen faintly waved, very slightly bent at  $R^3$ ;  $SC^2-R^1$  stalked for half their length; slightly cleaner white than fore wing; markings the same, but with the dots on postmedian line and especially the cell-dot larger, the median line proximal to the cell-dot, slightly incurved in cell, the postmedian fully 2 mm. from termen, with the usual sinuosities more noticeable.

Underside similarly but more weakly marked, the fore wing slightly pinker, the hind wing slightly whiter.

Cape Town, March 1912 (Lord Gladstone). Type in coll. Transvaal Museum.

20. *Ptychopoda umbricosta* Prout.

This is evidently a very variable species, unless, indeed, we have really to do with a group of distinct species with the same characteristic structure and general facies. In addition to the form *punctigera* Prout and the East African subspecies *depleticosta* Prout, already described, two other well-defined forms are now known to me; these I describe as follows:

f. *omoscotia* form. nov. ♀, 17-18 mm. Larger than typical *umbricosta*, the hind wing appearing slightly fuller, chiefly on account of a slightly stronger projection in the distal margin at  $R^3-M^1$ , both wings with minute but distinct black cell-dot above and beneath.

*Fore wing* with the costal margin not reddened, at most very slightly browner than the rest of the wing, on the other hand with the lustrous leaden-grey scales (which, though scarcely distinguishable without the lens, give to the whole wing its peculiar gloss) strongly accumulated at base of costa and here mixed with dark fuscous. Both wings with vestigial transverse lines indicated, much as in f. *punctigera* Prout, their actual and relative intensity varying according to the individual. Both wings beneath with the lines well expressed and mostly with rather strong irroration between the postmedian

and the subterminal; a fine interrupted terminal line and sometimes some slight dots on the fringes.

Pretoria North, 14, 20, 23 and 26 February 1917 (C. J. Swierstra). Type in coll. Transvaal Museum, paratypes in coll. L. B. Prout.

f. *ambiscripta* form. nov. (Pl. I, Fig. 21). ♀. Size and shape of the preceding, with the same cell-dots, base of costa, etc., but with the upper surface much more strongly marked, the median line in particular well developed, arising from some additional darkening of costal margin.

Pretoria North, 28 December 1916 and 14 February 1917 (C. J. Swierstra). Type in coll. Transvaal Museum, paratype in coll. L. B. Prout.

This is certainly a mere aberration of the preceding, but the status of both forms in relation to those previously described from South Africa is more problematical. Except of typical *umbricosta*, I have only seen ♀♀. All the forms have slightly sinuous distal margins, particularly of the hind wing, but in typical *umbricosta* the sinus between the radials is almost inappreciable, while the protuberance at  $R^3-M^1$  seems less salient than that at  $SC^2-R^1$ , whereas in the two new forms the sinus and posterior protuberance are better marked; *punctigera* seems somewhat intermediate or nearer to the latter, and if there be two species but not three I would now regard it as conspecific with the new forms, though distinguished by its smaller size, larger cell-dot of hind wing, somewhat different costal margin, etc. I would recommend the group to the attention of local entomologists for careful investigation on the spot and would point out that the breeding of *Ptychopoda* is very easy and would yield perfect males for structure studies and throw light on the limits of variation. The eggs are laid freely, especially if fine threads, frayed ends of string or rootlets of plants be offered, and nearly all the larvae feed readily on slightly withered leaves of the commonest weeds.

#### 21. *Ptychopoda trissosemia* sp. nov.

♂, 15 mm. Face black. Palpus blackish, paler beneath. Vertex whitish. Collar brown. Antennal joints scarcely projecting, ciliation even, about 1. Thorax and abdomen concolorous with wings, the abdomen with broad grey belts dorsally (occupying the greater part of each tergite, the first one blacker) and with some light ochreous hair ventrally. Hind leg not very short, heavily fringed with light hair above, only a minute tarsal extremity exposed.

*Fore wing* with costa moderately arched distally, termen oblique, smooth, very slightly curved; areole wanting,  $SC^{1-5}$  on a common stalk,  $SC^5$  arising first; whitish grey, clouded almost throughout with chocolate; a strong black cell-dot; black costal spots at one-third and two-thirds, from which arise the very vague and interrupted lines, the antemedian about parallel with termen, the postmedian slightly curved (rather less oblique than termen) anteriorly, nearly parallel with termen posteriorly; a fine and sinuous, not very conspicuous, reddish median line arising from costa opposite cell-dot, strongly outbent distally to cell, incurved between  $M^2$  and  $SM^2$ ; a slight terminal shade and still slighter subterminal; fringe long, proximally reddish, with strong round black dots at base (opposite the veins), distally pale. *Hind wing* with termen smooth, well rounded from apex to  $M^1$ , then straighter;  $SC^2$  moderately stalked; cell-dot even larger than on fore wing; the markings band-like, not strong, consisting of a median (touching the cell-dot), postmedian and subterminal (both interrupted about the radials) and terminal; fringe as on fore wing.

Underside of fore wing more greyish, of hind wing more whitish, cell-dots present, no other markings; costal margin of fore wing darker grey proximally,

then somewhat ochreous; fringes proximally more ochreous than above, unmarked.

Umbilo, 24 October 1915. Type in coll. Janse.

22. *Ptychopoda malescripta* ab. *benescripta* ab. nov.

♂, 14 mm. Rather paler than typical *malescripta* Warr. (*Nov. Zool.* iv. 57 [♀] = *nigrosticta* Warr. *ibid.* 61 [♂]), perhaps less roughly scaled; lines of upper surface more strongly developed, not thickened at costa of fore wing; median line of both wings finer, proximal subterminal broader, rather more distally placed, cell-dots obsolete.

Portuguese East Africa: Rikalla, May 1919 (Junod). Type in coll. Janse.

Perhaps a separate species, but *malescripta* (sometimes—as regards the underside always—unsuitably named) is certainly variable, and the new aberration is a little worn. The very short palpus and abbreviated hind leg agree, though the latter may be less hairy;  $SC^2$  of hind wing is stalked for about half its length.

23. *Ptychopoda subterfundata* sp. nov.

♂, ♀, 18–20 mm. Face blackish. Palpus very short; blackish. Tongue short and slender. Antenna of ♂ fairly stout, ciliation fully 1; of ♀ more slender, minutely serrate. Vertex whitish grey-brown; occiput light-brown. Thorax and abdomen concolorous with wings, the thorax a little brighter brown in front. Fore and middle coxae and femora more or less irrorated with fuscous. Hind tibia (and tarsus?) of ♂ with projecting scales and some longer hair-scales on upper side, the tarsus not distinct, probably quite small (tibia and tarsus scarcely longer than femur).

*Fore wing* elongate, costa gently arched posteriorly, apex round-pointed, termen smooth, strongly oblique, more so posteriorly than anteriorly; cell long (about three-fifths), areole very ample, venation otherwise normal; pale greyish ochreous, rather smooth, the dark irroration being fine and not very strong; lines blackish, generally rather feeble; antemedian oblique outward from costa at about one-third, divisible with the lens into a costal and a subcostal spot, then oblique inward, but only distinctly traceable in one ♀, in which it forms a minute dot on  $M$  and a larger one on  $SM^2$ ; median shade very weak or nearly obsolete, straightish, oblique, just beyond middle of wing; cell-dot minute but black; postmedian marked by a costal dash (parallel with termen) at just beyond two-thirds, obsolescent to  $R^1$ , here acutely angulated outward, thence fine and somewhat sinuous, but approximately parallel with termen, accentuated by dots on the veins; subterminal line sinuous, chiefly conspicuous through a band of grey shading which accompanies it proximally; no terminal line; fringe proximally with black dots opposite the veins. *Hind wing* rather elongate anteriorly, roundly bent about  $SC^2-R^1$  and again about  $R^2-M^1$ , straightish between, again straightish (minutely sinuate inward) between  $M^1$  and tornus; cell about one-half; concolorous with fore wing or proximally slightly whiter; a small black cell-dot; lines rather thick at abdominal margin, the postmedian also traceable across the wing in minute vein-dots; proximal subterminal shade rather strong in places, more macular than on fore wing; fringe as on fore wing.

Underside more strongly and darkly marked than above, the irroration being much heavier, almost entirely suffusing the proximal half of the fore wing; cell-dots larger; median line of hind wing sometimes complete.

Rhodesia: Umvuma, 25 December 1917, type ♂, 20 and 25 December 1917, two ♀♀ (A. J. T. Janse). Type in coll. Janse.

Larger and rather paler than *malescripta* Warr., postmedian better developed, tornal blotch beneath less strong.

SUB-FAMILY LARENTIINAE

24. *Ortholitha petrogenes* sp. nov. (Pl. I, fig. 17).

♂, 33 mm. Nearly related to *O. africana* Warr. (*Ann. S. Afr. Mus.* x. 22). Antenna in both species lamellate, but in *petrogenes* nearly twice as deeply, the projections being as long as the diameter of the shaft. Body and fore wing above entirely without the brown shades, remaining nearly uniform slate-grey, as in light forms of *Entephria flavicinctata* Hb., but with the yellowish scaling very much paler and duller and more diffused; median band narrower than in *africana*, not well defined; subterminal line broken up into interneural white spots; fringe chequered (as also in all the *africana* I have seen) but with the thick dark line which in *africana* connects the dark spots and which alone is mentioned by Warren, almost entirely wanting. Hind wing with *DC* very oblique posteriorly, but *R*<sup>2</sup> arising before middle. Hind wing and underside less brownish tinged than in *africana*, the underside recalling that of *E. flavicinctata*, its whitish hind wing showing an ill-defined greyish subterminal band.

Cape Town, May 1912 (Lord Gladstone). Type in coll. Transvaal Museum.

25. *Coenotephria respondens* sp. nov. (Pl. I, fig. 20).

♂, ♀, 22–23 mm. Head and palpus light ochreous brown; palpus about 1 $\frac{3}{4}$ , heavily scaled beneath, the third joint moderate, deflexed, partly concealed. Antennal shaft light ochreous brown, each proximal joint with a dark spot; ciliation in ♂ slightly over 1. Thorax light brown, dorsally with chocolate and blackish admixture. Fore leg blackish on upper and inner side.

Wings rather elongate. *Fore wing* with the wall between the areoles slender; *R*<sup>1</sup> just separate or just stalked; pale greenish, in the type almost entirely overlaid with ochreous-brown scales, in the ♀ allotype much less overlaid; markings chocolate, varying in depth; basal patch sinuous-edged (gently incurved in middle), bounded by a slight whitish line; median band moderate, almost solid, bounded by slight whitish lines, the proximal straightish, the distal more nearly parallel with termen than in *prasinaria* Warr., slightly dentate in its anterior part, weakly incurved between the radials, the succeeding lobe not very strong, the posterior part forming a shallow sinus inward and very feebly lunulate; cell-spot not strong, sometimes set in a small ochreous-brown patch on *DC*; faint traces of one or two lines beyond and parallel with the postmedian; subterminal weak and slender, lunulate-dentate; an oblique pale streak from apex, followed posteriorly by some ill-defined dark shading, at least as far as *R*<sup>3</sup>; some still weaker proximal dark shading to the subterminal posteriorly; terminal dark line only slightly interrupted; fringe spotted, mostly pale at base (defective in both examples). *Hind wing* whitish, with some weak brown irroration, which becomes slightly stronger distally; terminal line as on fore wing.

*Fore wing* beneath rather paler than above, the markings shadowy; hind wing darker than above, with coarse irroration, a cell-spot present and a pale band distally to the postmedian.

Cape Town, March 1912 (Lord Gladstone). Type ♂ in coll. Transvaal Museum; allotype ♀ in coll. L. B. Prout.

Differs from *prasinaria* Warr. (*Nov. Zool.* VIII. 13) in the longer wings (especially hind wing), paler hind wing, with more strongly biangulate *DC*,

and differently shaped median band of fore wing. Probably almost as variable as *Eupithecia cidariata* Guen. and showing a similar range of colours to that and some other South African Larentiids.

26. *Mimoclystia tepescens* sp. nov.

♂, ♀, 23–27 mm. Closely related to the type species, *undulosaria* Warr., of which it may possibly prove the Rhodesian race. Very different in aspect on account of the total absence of red shades, the markings being brownish-grey just as in the European *Euphyia scripturata* Hb.

*Fore wing* with the white parts cleanest at costal margin, thus here rather conspicuous; median band apparently rather more distally placed than in *undulosaria*, its double distal projection between  $R^3$  and  $M^2$  rather strong, the succeeding pale band stronger than in *undulosaria*, its whitest (proximal) part being better developed; subterminal line accompanied proximally by a less definite, less broad shade; distal area more mixed with white between  $R^3$  and  $M^2$ . *Hind wing* fairly sharply marked, the postmedian line stronger than the other markings, the two lines proximally to it also moderately well developed.

Underside with the distal area tinged with brown, on the fore wing more or less interrupted by a paler space between  $R^3$  and  $M^2$  and on the hind wing becoming weaker posteriorly.

Rhodesia: Umvuma (A. J. T. Janse), 24 December 1917, type ♀ in coll. Janse.

27. *Eucymatoge pretoriana* sp. nov. (Pl. I, fig. 4).

♂, 17–18 mm. Much like *Eupithecia connexa* Warr. (*Nov. Zool.* vi. 297, Unyoro), of which, but for the double areole, I should have treated it as a subspecies. Much less brown, on account of stronger irroration of dark grey scales; markings stronger; postmedian line of hind wing more angulated than is usual in *connexa*.

Pretoria, 1 December 1911 (Capt. Paget). Type in coll. Transvaal Museum; paratypes in coll. L. B. Prout.

28. *Eupithecia emmeles* sp. nov.

♂, 23 mm. Head and body pale grey, the abdomen beneath whitish. Face without projecting cone of scales. Palpus stout, heavily scaled, rather less than 2. Antennal ciliation minute. Abdominal crests slight. Fore leg above fuscous, spotted with white at ends of joints.

*Fore wing* with termen not extremely oblique; very pale brownish grey, somewhat glossy, in the distal area somewhat less pale; basal patch darker grey, edged by a fine curved dark line and immediately succeeded by a less fine whitish line; median area similarly darkened, its edges blackest anteriorly, its width at costa less than 2 mm. and in posterior half only 1 mm., its proximal edge slightly curved and waved, its distal waved and with slight projections about the radials; an elongate black cell-mark on this band, rather nearer to its distal than to its proximal edge; whitish lines bounding the band; a somewhat lunulate-dentate whitish subterminal line, thickest at costa; oblique outward behind  $SC^5$ , parallel with and less than 1 mm. distant from termen for some distance, slightly bent inward behind  $M^2$ , then running to tornus; a dark terminal line, interrupted by whitish vein-dots; fringe long, scarcely chequered, slightly paler distally. *Hind wing* not very short; glossy, slightly paler than fore wing; a vague angulated line towards the middle, followed distally by an ill-defined whitish band; terminal dark line obsolete; fringe very narrowly pale at base.

Underside more suffused, strongly glossy brown-grey, the fore wing with a vague dark line indicating the distal edge of the median band and a vague whitish band beyond, the hind wing with corresponding (but more proximally placed and much sharper) markings; both wings also with slender whitish line near the termen, sometimes diffusely bounded distally.

Natal: Estcourt. Type in coll. Janse.

Near *perizomoides* Prout, but larger, greyer, the hind wing less devoid of markings, the underside different, etc. The abdomen is unfortunately lost in the type, but I have been able to supplement my description from a specimen in my collection, without locality label, sent me some years ago by the Natal Museum.

29. *Eupithecia laticallis* sp. nov. (Pl. I, fig. 2).

♂, 22–23 mm. Face light brown, with a narrow band of dark scaling above; vertex more whitish. Palpus scarcely  $1\frac{1}{2}$ ; light brown. Antennal ciliation short (less than  $\frac{1}{2}$ ). Thorax above light brown, with some whitish admixture, a blackish patch in front and ill-defined scattered blackish spots. Abdomen above much chequered, the ground-colour light brown (at base whitish), the crest on 2nd somite rather bright brown, the tips of the other crests blackish, followed immediately by white spots, a subdorsal pattern of ill-defined blackish spots, those on the first two somites larger and blacker. Body beneath mostly pale. Legs on the inner side partly infuscated, with whitish dots at end of tibia and tarsal joints.

*Fore wing* elongate; light brown with fine fuscous irroration, the veins (especially *M*) partly spotted with blackish; some slight hoary shading in proximal area, in cell and between cell-dot and postmedian; cell-dot small but sharp; the dark lines mostly not sharp, strongest and somewhat oblique inward from costa, strongly oblique outward to cell-fold or across *R*<sup>1</sup>, then approximately parallel with termen; those which proximally bound the median area further with a sharp outward angle on the fold; the double line which distally bounds the median area sharply defined, slightly angulated outward behind the fold; a relatively broad clear band between these and the distal area; distal area somewhat darkened, especially in longitudinal bands between the veins; subterminal line whitish, broken into interneural dots or lunules, that on the fold slightly enlarged, slightly connected by a very fine curved line with the one in front of it, all of the series more or less blackish-edged proximally; termen with moderate blackish interneural dashes; fringe chequered. *Hind wing* somewhat elongate; paler, except at abdominal and distal margins; cell-dot minute or obsolescent; transverse dark lines rather thick and strong at abdominal margin, becoming weak (the proximal ones quite obsolete) anteriorly; subterminal line more continuous than on fore wing, dentate, but not very sharply defined.

Fore wing beneath more smoky, with strong cell-dot, a few dark costal spots in central area and complete or nearly complete (but indistinct) postmedian lines; shading in distal area vague. Hind wing dirty whitish, with rather large black cell-dot and fairly distinct lines—an antemedian, a rather thick postmedian near the cell-dot, a more interrupted line beyond this and a thick line or shade bounding the (slightly dark-shaded) distal area proximally.

Cape Town, May 1912 (Lord Gladstone). Type in coll. Transvaal Museum. Paratype in coll. L. B. Prout.

30. *Eupithecia albicristulata* sp. nov.

♂, 19 mm. Face and vertex dull cinnamon-rufous. Palpus about  $1\frac{1}{2}$ , dull fuscous, with some pale sprinkling. Antennal ciliation scarcely over  $\frac{1}{2}$ . Occiput



brown. Thorax in front reddish brown with dark admixture; otherwise paler. Abdomen dorsally vandyke brown, with some whitish scales at the extremities of the segments, the crests minute, white-tipped; ventrally cinnamon, again becoming vandyke brown in the middle.

*Fore wing* whitish grey, mostly obscured by fuscous irroration; suffusions of a more ferruginous tone along the veins distally, along *SC* and *SM*<sup>2</sup> to the base and about the base of *R*<sup>3</sup>-*M*<sup>2</sup>, nowhere sharply defined; costal margin dark spotted; proximal area quite indefinitely marked, with mere suggestions of the usual transverse rippling; an ill-defined pale band about the middle, acutely angulated outward at *R*<sup>1</sup>, slightly bent inward at *M* and outward at fold, edged proximally and bisected by ill-defined dark lines, separated distally by a vague dark band from a similar but less acutely angulated pale outer band; distal area mostly dark, traversed by three excessively fine, slightly interrupted, crenulate whitish lines, the third touching the terminal line; terminal line black, interrupted by minute whitish dots at the veins; fringe rather dark, with slight pale admixture opposite the veins, whiter tips, a very fine whitish line at base and another near middle. *Hind wing* mostly whitish grey with faint darker shadings, the distal region narrowly and the abdominal region to *M* and *M*<sup>2</sup> concolorous with fore wing; abdominal area traversed by whitish bands and lines corresponding to those of fore wing; a minute cell-dot; fringe rather paler and more weakly marked than that of fore wing.

Fore wing beneath rather strongly marked at costa and with fairly distinct, but not bisected, pale outer band; proximal area with glossy greyish suffusions, whiter at hind margin; a minute cell-dot present; distal area feebly marked except at termen, where the veins become whitish. Hind wing whitish, with four thick, distinct, complete, somewhat curved transverse lines, the second crossing the black cell-dot, the fourth (bounding the outer pale band) the thickest; distal area dark, the black terminal line interrupted by minute whitish dots at the veins.

Near Nkandshla, Zululand: "Prospect 94 B," 17 January 1916. Type in coll. Janse.

The upperside rather recalls *vermiculata* Warr. (*Nov. Zool.* VIII. 12, Uganda), the underside *hypophasma* Prout. Wings rather less elongate than in the latter, colour different; oblique pale apical shade wanting.

### 31. *Eupithecia infausta* sp. nov. (Pl. I, fig. 8).

♂, ♀, 20 mm. Rather smaller and narrower winged than *infelix* Prout (*Nov. Zool.* XXIV. 434), postmedian line of fore wing more acutely angulated, cell-mark punctiform, surrounded by an irregular ring of whitish scales, sub-terminal markings less conspicuously wedge-shaped, fringe of hind wing not or scarcely chequered.

Cape Town, May 1912 (Lord Gladstone). Type in coll. Transvaal Museum. Paratypes in coll. L. B. Prout.

### CHIONOPORA gen. nov.

Face smooth and flat. Palpus moderate, hairy. Tongue wanting. Antenna in ♂ bipectinate to apex. Pectus moderately hairy. Femora glabrous. Hind tibia in ♂ with terminal spurs only. Abdomen moderately robust, not crested. Fore wing with costa, except at base and near apex, straight to faintly sub-concave, apex moderately sharp, termen bowed, extremely oblique posteriorly, tornus not very strong; cell considerably over one-half, *DC*<sup>1</sup> somewhat curved, areole double, the dividing vein weak (perhaps occasionally wanting), *SC*<sup>1</sup> from or just before apex of outer areole, *SC*<sup>5</sup>, <sup>2, 3, 4</sup> well stalked beyond, *R*<sup>1</sup> not

stalked,  $R^2$  slightly before middle of  $DC$ ,  $M^1$  widely separate. Hind wing rather small, apex moderately rounded, termen well rounded, tornus moderate; frenulum developed; cell over one-half,  $DC$  markedly oblique,  $C$  anastomosing with  $SC$  for a considerable distance from base to near end of cell,  $SC^2-R^1$  very long-stalked to coincident,  $R^2$  from scarcely before middle of  $DC$ ,  $M^1$  separate.

Type of the genus: *Chionopora tarachodes*, sp. nov.

Affinities somewhat doubtful. The build suggests the *Chesias* group, but the fore tibia is without claw and the abdominal region of the hind wing without special modification.

### 32. *Chionopora tarachodes* sp. nov. (Pl. I, fig. 5).

♂, 21–24 mm. Head and thorax predominantly white. (Abdomen discoloured by grease in all the examples.)

*Fore wing* white, with dull dark-green markings; some dots near base, tending to form a biangulate line; a narrow, irregular, very oblique ante-median band before one-third, attenuated at hind margin; a slight costal mark opposite the distal extremity of this band; a less narrow, irregular postmedian band from beyond middle of hind margin, rather more oblique than termen, suddenly widening (chiefly on its proximal side) after crossing  $M$  and the base of  $R^3$ , enclosing a white cell-spot, but ceasing in its proximal part on reaching  $SC$ , in its distal at  $SC^5$ ; one or two very vague lines beyond, the proximal one in places accentuated by small vein-dots and anteriorly forming a distinct curve round the extremity of the postmedian band, reaching costa at three-fourths; two rows of submarginal cloudy spots, the proximal very vague, becoming confluent with the distal about  $M^2$ ; terminal line very fine, bearing minute black dots at the veins. Hind wing mostly occupied by shadowy greenish markings, leaving some white near base, a sinuous white band beyond middle, bisected by a line or row of dots, and narrow, ill-defined white areas proximally and distally to the distal submarginal spots; terminal line as on fore wing.

Underside white, with faint indications of the principal markings.

Portuguese East Africa: Catembe, near Lorenzo Marquez, January 1916 (Habenicht). Type in coll. Transvaal Museum. Paratypes in coll. L. B. Prout.

The markings slightly recall those of the Indian *Pseudeuchlora kafebera* Swinh.

## SUB-FAMILY GEOMETRINAE

### 33. *Drepanogynis vara* sp. nov.

♂, 27–29 mm. General coloration and facies of *devia* Prout (*Ann. Transv. Mus.* III. 210, t. 12, f. 12), but somewhat brighter; structure the same. Readily distinguishable as follows:

*Fore wing* with the termen more noticeably bent at  $R^3$ ; antemedian line strong, right-angled in cell; postmedian forming a strong lobe outward at  $R^3-M^1$  (in the paratype a little more pointed at its extremity—behind  $R^3$ —than in the type; some grey shades just outside the postmedian, becoming strong between  $M^2$  and hind margin; a dark subapical dash nearly as in *nigrapex* Prout (*tom. cit.* p. 211, f. 1) but accompanied by terminal clouding on  $R^1$ . *Hind wing* with postmedian line rather better expressed than in *devia*.

Underside nearly as in *devia*, costal margin of fore wing more brightly ochreous, especially towards apex.

Natal: Karkloof (A. J. T. Janse), 27 January 1917, type in coll. Janse; 28 January 1917, paratype in coll. L. B. Prout.

Can this be the hitherto unknown ♂ of *nigrapex*, in spite of the much narrower wings, different coloration and quite differently shaped antemedian line?

34. *Axiodes interscripta* sp. nov.

♂, 30 mm. Head, body and wings grey, formed of an intricate admixture, in varying proportions, of browner, whiter and more blackish scales. The thorax above darkest, the abdomen at the incisions and the whole body beneath paler and more brownish.

*Fore wing* broader than in most of the genus; the white irroration rather strong, especially from base to near middle and again in an obliquely bounded band from apex distally to the postmedian; the dark scales mostly arranged transversely, tending—especially in the median area—to suggest a number of very fine, interrupted transverse lines; the true lines blacker, but fine and not very conspicuous, except at *M*, *DC*<sup>3</sup> and *SM*<sup>2</sup>, where they are slightly thickened and the postmedian further accentuated by whitish edging distally; antemedian acutely angled outward on *M*, then oblique inward but with a slight tooth outward at fold and an acute one at *SM*<sup>2</sup>; postmedian oblique inward from three-fourths costa, slightly thickened at first, incurved at base of *R*<sup>3</sup> and *M*<sup>1</sup>, then nearly vertical to hind margin, lunulate-dentate; distal area beyond the pale band darker; terminal line blackish; fringe very narrowly mixed with whitish at base. *Hind wing* more brownish, with a broad but very ill-defined darker shade distally.

Fore wing beneath with costal edge pale with dark dots and strigulae, the rest of the wing nearly as hind wing above; hind wing rather paler than above, especially proximally, the dark irroration scattered, but more noticeable.

Cape Colony: Willowmore, September 1918 (Brauns). Type in coll. Janse.

35. *Axiodes trachyacta* sp. nov.

♂, 35 mm. Head and body pale ochreous grey, the head and the thorax above mixed with chocolate.

*Fore wing* narrow, with termen obliquely curved, anteriorly and posteriorly smooth, at *R*<sup>1</sup>–*M*<sup>1</sup> weakly crenulate, the strongest tooth at *R*<sup>1</sup>; *SC*<sup>4</sup> running to apex, *SC*<sup>5</sup> to termen over 1 mm. from apex; pale ochreous grey, heavily shaded—except at base of costa and especially in the whole distal area—with pale reddish; the black-grey irrorations mostly striguliform or vermiform, in places sufficiently in alignment to suggest extremely fine and somewhat interrupted transverse lines; the true lines black; antemedian from costa at 3 mm.; very deeply excurved in anterior half, incurved at fold, weak posteriorly; postmedian from costa 2 mm. from apex to hind margin at scarcely two-thirds, irregularly dentate, the teeth inward being on the veins and generally more acute than the outward ones, those on *R*<sup>1</sup>, *M*<sup>1</sup>, *M*<sup>2</sup> and submedian fold more or less deep (the three last-named placed in a shallow bay), the others more or less slight. *Hind wing* proximally and anteriorly of the paler ground-colour, distally and posteriorly reddish shaded, most strongly so near tornus; a fine, indistinct, irregular, distally pale-edged postmedian line traceable from hind margin about 2 mm. from tornus, fading out before reaching *R*<sup>1</sup>.

Both wings beneath predominantly pale; fore wing with costa weakly dark-spotted, the rest, as far as the postmedian line, with light greyish gloss; the lines indicated, especially the postmedian, which is accompanied by a slight dark shade proximally; both wings with the distal area slightly paler than the rest.

Cape Colony: Willowmore, October 1915 (Brauns). Type in coll. Janse.

36. *Omphalucha indeflexa* sp. nov. (Pl. I, fig. 12).

♂, 37 mm. Face and palpus black, with a few light scales. Vertex brown, anteriorly mixed with black. Thorax above as fore wing, a little rufescent in middle, metathorax with well developed double black-mixed crest; pectus mostly dark-grey; abdomen variegated with browns, black and whitish. Legs ochreous, dotted with blackish, the tarsi mostly blackish with pale ends to the joints.

*Fore wing* not extremely narrow, but with costal margin faintly concave in middle; brown, irrorated with whitish and black, the veins more ochreous; cell-mark black, slightly elongate; lines black; antemedian strong, from nearly one-third costa to hind margin close to base, very weakly curved, slightly dentate outward, only the tooth on *M* at all strong; median ill-defined, rather beyond middle, obscuring the cell-spot, almost obsolete between  $R^3$  and  $M^2$ , unless represented by two more proximally placed dashes (on *M* and  $SM^2$ ); postmedian fine, from nearly four-fifths costa to five-sevenths hind margin, minutely denticulate outward or thickened on the veins, shallowly excurved between the radials, almost inappreciably incurved before and behind; subterminal line whitish, mostly extremely fine and lunulate, but forming a rather large spot in front of  $R^1$  and a little thickened between  $R^3$  and  $M^2$ ; the lunules before  $SC^5$  and between the radials filled-in proximally with ill-defined blackish spots; terminal line black, rather strong, thickening between the veins; fringe dark-spotted at the veins. *Hind wing* slightly broader than in *maturnaria* Möschl.; considerably whiter than fore wing, especially in anterior part; cell-mark strong; antemedian line wanting; median very feeble anteriorly, well-defined from cell-mark to abdominal margin; postmedian strong from  $SC^2$ , denticulate, slightly incurved between  $SC^2$  and  $R^1$ , otherwise straightish (rather less curved than *termen*); subterminal obsolete anteriorly, nowhere conspicuously thickened, narrowly dark-shaded proximally; terminal line and spots on fringe strong.

Both wings beneath whitish, with fairly strong, though not quite uniform, dark-grey irroration; cell-spots sharply black; postmedian line of fore wing present, but without the outward curve; median and postmedian of hind wing indicated but weak.

Pretoria North, 26 March 1917 (C. J. Swierstra). Type in coll. Transvaal Museum.

Apart from its shape and colouring, this species is distinguishable at a glance from *maturnaria* Möschl. (= *crenulata* Warr., *Nov. Zool.* iv. 90 = *hirta* Warr. *op. cit.* xii. 397), by the very much less irregular postmedian line of both wings. Probably nearer to *rufinubes* Warr. (*Nov. Zool.* xii. 398), from Angola, but rather narrower winged, without the rufous shades, the postmedian line even less incurved than in that species.

37. *Hemerophila* (?) *rubidivenis* sp. nov.

♀, 43 mm. Head and palpus brown, with some blackish admixture, especially on face and outer side of palpus. Palpus rather short. Antenna shortly bipectinate, the teeth about 2, becoming vestigial apically. Thorax light ochreous brown, above irrorated with red and transversely marked with black; abdomen rather robust, without red irroration.

*Fore wing* with costa slightly curved at base and near apex, apex rather square, *termen* waved, anteriorly little oblique, from  $R^3$  much more so; cell fully one-half,  $DC^3$  incurved,  $SC^{1,2}$  moderately stalked,  $SC^2$  osculating with  $SC^{3-4}$ ,  $R^2$  from before middle,  $M^1$  well separate; rough-scaled, brown, irrorated with black and glaucous white; the veins reddish, marked with black but

without white; costal margin irregularly dark-spotted; cell-spot black, fairly large, with a few pale scales in centre; lines dentate, strongest on the veins, where their black teeth project into the median area, their reverse sides narrowly edged with glaucous whitish; antemedian from one-third costa, rather straight to base of  $M^2$ , then oblique inward to less than one-third hind margin; postmedian from five-sevenths costa, nearly parallel with termen but slightly more incurved behind middle; subterminal dentate, very indistinct, chiefly defined by a weak dark shade proximally; terminal black dots not conspicuous; fringe similarly variegated, with suggestions of a dark traversing line. *Hind wing* with termen more crenulate; similar to fore wing but with the first line wanting, the cell-spot slightly smaller; proximal dark shading of subterminal strongest from  $M^2$ , running rather obliquely to abdominal margin near tornus.

Underside paler, the markings (except antemedian of fore wing) expressed, but more weakly than above; fringes almost unicolorous.

Natal: Karkloof, 25 January 1917. Type in coll. Janse.

Although the rough scaling, crenulate hind wing, and character of markings refer this species clearly to the *Boarmia* section, its exact affinities are quite uncertain; if I am right in making it a rather broad-winged *Hemerophila*, it is the first African species of the section *Phthonandria* Warr. Its general aspect is more *Gnophos*-like.

38. *Gnophos rubricimixta* ab. *euryta* ab. nov. (bon. sp.?).

♀. Cell-rings larger, fully open. Both wings with the reddish scaling concentrated in a regular, bright, conspicuous bar or narrow band distally to the postmedian, the longitudinal arrangement of the scaling not noticeable; fore wing in addition with some reddish suffusion in basal area.

Cape Colony: Willowmore, 5 August 1919 (Brauns). Type in coll. Janse.

39. *Ectropis atelomeres* sp. nov.

♂, 29 mm. Build slender. Face blackish, with a paler line down the centre. Palpus short and rather slender (scarcely over 1); blackish, with the first joint grey. Antenna with the fascicles of cilia rather slender, almost sessile, over 1. Head and body concolorous with wings, the abdomen with a pair of indistinct dark dorsal spots at the end of each segment. Hind tibia not dilated.

Wings narrower than in *delosaria* Walk., paler (more approaching *spoliataria* Walk. but a little greyer, scarcely ochreous-mixed). *Fore wing* with costa rather straight, termen smooth; cell one-half,  $SC^{1,2}$  coincident, free; fovea wanting; moderate blackish-fuscous irroration; costal edge with blackish dots or minute strigulae; lines blackish fuscous; antemedian from nearly one-third costa to about one-fourth hind margin, strongly excurved, at fold slightly sinuate inward, at costa a little thickened, on  $M$  crossed by a blackish dash, from  $SM^2$  to hind margin forming a blackish comma, with its head on the vein, its convexity outward; a small oval discal ring beyond middle, the median shade only distinct from this to costa and in a hind-marginal spot; postmedian line passing near the cell-mark and slightly incurved in its posterior half, formed of short dashes on the veins, and in the posterior half fine connecting lunules, that between  $M^2$  and  $SM^2$  the deepest; subterminal line fine and ill-defined, with traces of the blackish markings which characterize *delosaria* and other allies, but reduced in size; terminal interneural dots small; fringe with dark spots opposite the veins. *Hind wing* with crenulation of termen slight; costal area rather paler; a strong median shade from cell-fold to abdominal margin; a discal ring as in fore wing; postmedian from abdominal

margin nearly as on fore wing, but with its deepest sinus in front of  $M^2$ , thence running out along  $DC^4$ , its anterior half extremely weak, punctiform; distal area corresponding to that of fore wing.

Fore wing beneath almost equally suffused and irrorated throughout, the costal edge cleaner, more ochreous, dotted or strigulated as above; a very small pale apical patch; indications of a cell-dot or small spot (not ring). Hind wing rather paler, the cell-spot rather strong but not annular, the other markings of upperside reproduced but indistinct.

Cape Colony: Willowmore, October 1916 (Brauns). Type in coll. Janse.

There may probably be in some other fauna a "genus" of the *Boarmia* group which would accommodate this species better than *Ectropis*, but its classification as a whole is a matter of extreme difficulty and until it can be taken in hand seriously it seems best to follow Warren in calling the ciliate species of the group *Ectropis*. Except for the cell-marks, the crenulate hind wing and its strong median shade, the new species recalls "*Idiotephra*" *simplex* Warr.

#### 40. *Cleora bistonica* sp. nov.

♂, 37 mm. In structure similar to *spuria* Prout (*Nov. Zool.* xxii. 360), antenna pectinate to nearly two-thirds (about 32 joints). Face black, with upper part creamy white. Palpus mixed red-brown, black and white. Vertex and front of thorax cream-white, with some red-brown admixture. Antennal shaft white, irregularly dark-spotted, most strongly from near base to about one-third. Thorax red-brown, above mixed with black and more sparingly with white; black bands bordering the white front and traversing the tegulae. Abdomen white, with strong central spots and irregular belts of red-brown mixed with black, the posterior belts more rust-coloured. Legs blackish, banded with white, the long hair of the fore tibia mainly white.

*Fore wing* white, with quite sparse brown and black irroration; costal edge rather more strongly dusted and with irregular black spots at the origin of all the lines; a subbasal at 1 mm., sharp but only extending from  $M$  to  $SM^2$ ; antemedian rather fine and sharp, from before one-third costa, obtusely angulated outward on  $M$ , then oblique inward, outbent at  $SM^2$ , then curving inward to hind margin at little beyond one-fourth; a weaker, interrupted line proximally to this, closer to it on hind margin than on costa, the interspace partly filled in with brown shading; median beyond middle of costa, thick and angulated inward about  $C$  and  $SC$ , then very oblique outward to behind  $R^1$ , here sharply bent, becoming very fine and obsolescent, bisinuate, touching the postmedian at fold; postmedian strong, with minute teeth outward on the veins, from beyond two-thirds costa, fairly direct to fold, then thick, oblique outward, again tapering to a point at three-fourths hind margin; a patch of brown, sparsely black-mixed irroration costally between postmedian and subterminal, bounded posteriorly by a more ferruginous spot on  $R^1$  (distally to which this vein continues faintly ferruginous); a thick black longitudinal streak outward from postmedian between  $R^2$  and  $R^3$ ; a dentate white subterminal, scarcely indicated except by faint (only against the brown costal patch distinct or blackish) proximal shading; an ill-defined dark spot at distal margin between the radials; a terminal line of partly connected black lunules; fringe white, with dark spots at the vein-ends, posteriorly thin, anteriorly thicker. *Hind wing* with termen weakly subcrenulate, slightly truncate between  $SC^2$  and  $M^1$ ; white, almost without irroration except at abdominal and distal margins; postmedian line present, but much weaker than on fore wing, chiefly marked by the vein-teeth and a slender bicurved mark between  $M^2$  and abdominal margin; proximal shading of subterminal thickened in an

oblique streak between  $M^2$  and tornus, otherwise very slight; a dark mark on middle of  $SM^2$ ; terminal line as on fore wing; fringe not appreciably spotted.

Underside similar, but with the fore wing more suffused with brownish along costal margin, subapical suffusions more extended, subbasal line wanting, antemedian weakened, subterminal shading wanting in posterior half, hind wing with a slight antemedian line from costal margin to  $SC$ .

Nkwaleni, 10 January 1916. Type in coll. Janse.

Rather suggestive of a *Biston*.

41. *Cleora haploocnema* sp. nov.

♂, 40 mm. Face light brown, more whitish below and with a blackish band across the middle. Palpus moderate or rather short; light brown, mixed with blackish. Head and body very pale brown, the legs more or less dotted with blackish, fore coxa largely blackish above. Hind tibia not dilated.

*Fore wing* with termen feebly subcrenulate;  $SC^1$  and  $SC^2$  free,  $R^2$  from very slightly before middle of  $DC$ ; very pale brown, with some warmer brown and sparser blackish irroration; lines brown, mixed with blackish fuscous; antemedian from three-tenths costa, forming two angles (the first inward, the second outward), then running almost straight from  $SC$  to hind margin, duplicated by a brown line or shade proximally from the first angle to hind margin; median shade only developed anteriorly (proximal to middle of costa), here formed like antemedian; postmedian from seven-tenths costa, the anterior bends weaker and more gradual, the second being about  $R^2$ , whence the line runs rather more obliquely than termen, and very slightly incurved, to about three-fifths hind margin; a feeble, interrupted line or shade just distally to the postmedian, forming more noticeable dark spots in the cellules before and behind  $R^3$ ; a pale lunulate-dentate subterminal line, scarcely indicated except by some irregular dark spots which fill in the lunules proximally, those between the radials strongest and blackest, somewhat elongate; termen with inter-neural black dots. *Hind wing* with termen crenulate; costal edge pale and unmarked as far as the postmedian line; both lines well developed posteriorly, the antemedian reaching abdominal margin at one-fourth, the postmedian beyond middle; the latter followed by a brown shade distally; a moderate dark cell-dot; subterminal line and shading nearly as on fore wing, the single spot between  $R^1$  and  $R^3$  less blackened; terminal dots as on fore wing.

Fore wing beneath slightly paler, with irregular and weak dark maculation and irroration and with traces of the markings of the upperside, the subterminal shading more continuous and band-like, especially in anterior part; a moderate cell-dot. Hind wing paler, the cell-mark rather large and somewhat crescentic, postmedian line fairly well developed in its posterior half.

Nkhandla Forest, 21 January 1916. Type in coll. Janse.

42. *Boarmia breijeri* sp. nov. (Pl. I, fig. 14).

♂, 53 mm. Face scarcely prominent, moderately rough-scaled; dark brown, mixed with black. Palpus rather short, scales of 2nd joint mixed with hair; brown, blackened on outer side. Tongue short. Antennal pectinations very long. Pectus, femora and base of abdomen beneath rather strongly hairy. Hind tibia not dilated. Head and body predominantly light brown-grey, the vertex paler, the cheeks, front of thorax beneath and upper and inner sides of fore and mid legs infuscated; some dark admixture on dorsal surface of abdomen, strongest on the 2nd and 3rd tergites.

*Fore wing* with termen subcrenulate; no fovea;  $SC^{1,2}$  stalked, separating a little after (type) or a little before the branching of  $SC^5$  from  $SC^2$ ; light

brown-grey, formed of a mixture of white, light-brown (with a very slight olivaceous tinge) and a very few black scales, the scaling thinner than in normal *Boarmia*, but somewhat rough, the prominent tips of the white scales shiny, imparting a slight iridescence; cell-spot rather large, blackish, but with its greater part (central and anterior) overlaid with raised blue-white scales, thus recalling that of *Ascotis selenaria* Schiff.; lines light-brown, feeble, but thickened and black-mixed costally, the median otherwise virtually obsolete, the others lunulate-dentate, black-marked on the veins, the postmedian markedly incurved between  $M^1$  and  $SM^2$ ; some dark dashes on the veins distally; subterminal white line thick (especially in the paratype), strongly but rather irregularly lunulate-dentate; termen with short black interneural dashes; fringe narrowly pale at base, at tips and opposite the veins, otherwise dark-clouded. *Hind wing* with termen more noticeably crenulate; cell-spot and the markings beyond nearly as on fore wing, some stronger dark shading at abdominal margin proximally to the subterminal.

Underside pale, with strong black cell-spots and (on the fore wing) subapical costal spot, closely as in *Cleora proximaria* Walk. or some aberrations of *Boarmia cataimena* Prout; the type in addition shows traces of the postmedian line, with distinct dark costal spots marking its origin, but these are wanting in the other specimen.

Nelspruit, November 1917 (H. G. Breijer). Type in coll. Transvaal Museum. Griffin M., January 1915 (H. G. Breijer), a worn specimen, evidently closely agreeing, in coll. L. B. Prout.

43. *Boarmia gladstonei* sp. nov. (Pl. I, fig. 19).

♂, 23 mm. Face rather flat; whitish brown. Palpus little over 1, with long-projecting hair-scales beneath, terminal joint quite small, concealed; whitish-brown. Tongue well developed. Vertex white, with a few brown scales. Antenna pectinate nearly to tip, the branches long (perhaps 8 or more), shortening rather regularly. Thorax above brown, somewhat variegated, somewhat irrorated, the patagia whiter, in the middle with a fuscous transverse bar. Abdomen above brown-whitish, with brown belts (slightly interrupted by white dorsal ridge), behind which stand paired blackish spots. Body beneath whitish, sparsely and irregularly dark-speckled. Fore leg largely infuscated; middle and hind legs pale, with weak dark spots; hind tibia not dilated.

Fore wing narrow, termen strongly oblique, very gently curved, smooth in its posterior half, very faintly waved anteriorly; fovea not developed;  $SC^{1,2}$  coincident, free; variegated whitish and light-brown, sparsely and irregularly irrorated with fuscous; costal margin dotted with fuscous; cell-dot indistinct, rather elongate; markings dark fuscous; an ill-defined spot behind cell close to base; lines more oblique than termen; antemedian from one-fifth hind margin, fine and extremely oblique to near  $M$ , incurved and thickened on crossing  $M$ , running outward just inside cell to near origin of  $M^1$ , then obsolescent, reappearing as a distinct dash at apex of cell; median line brown, close to antemedian, only differentiable posteriorly; postmedian from two-fifths hind margin to  $R^1$  about 3 mm. from termen, somewhat thickened between  $M^2$  and  $R^3$ , very slightly angled outward at  $R^2$ , somewhat thickened again at  $R^1$ ; an interrupted brown line duplicating the postmedian distally; subterminal white, irregularly lunulate dentate, accompanied proximally by some fuscous spots in anterior half and near hind margin, distally by some weak fuscous shading; termen with rather strong black interneural lunules, those between the radials (especially the anterior) more triangular; fringe



brown, mixed with glaucous whitish, especially opposite the veins and in a line beyond the middle. *Hind wing* narrow, termen crenulate from  $SC^2$  (where it is rather prominent) to  $R^3$  and more feebly so posteriorly; whiter than fore wing, especially in cell and costal area; cell-dot dark grey, not minute; a median brown shade at abdominal margin only; postmedian line distinct from abdominal margin to radial fold, double as on fore wing; distal area nearly as on fore wing, but with the markings obsolescent apically.

Fore wing beneath paler, with stronger costal strigulae; irregular grey mottlings in cell and distally; a distinct grey cell-spot; indications of the postmedian line of upperside behind it; a curved postdiscal line of minute dots from  $R^1$  to  $M^2$ , the first one enlarged into a spot; subterminal line and its proximal spots developed anteriorly only; terminal line and fringe more weakly marked than above. Hind wing beneath whitish, with some coarse irroration; a rather thick but ill-defined antemedian line; a strong blackish cell-dot; a curved, slightly interrupted, in places thickened postmedian line just beyond it; the proximal spots of the subterminal strong almost throughout.

Cape Town, April 1912 (Lord Gladstone). Type in coll. Transvaal Museum.

Perhaps referable to *Hemerophila*, which seems scarcely tenable as a genus. The underside rather recalls that of *Pachypalpia subalbata* Warr. (*Nov. Zool.* vii. 98).

#### 44. *Peridela lechriospilota* sp. nov.

♂, 22 mm. Face nearly smooth. Palpus about  $1\frac{1}{2}$ , with 2nd joint heavily scaled. Antennal pectinations 3 or 4, decreasing in length rather gradually distally, the last few joints not pectinate. Hind tibia not dilated. Head and body concolorous with wings.

*Fore wing* with  $SC^{1,2}$  coincident, anastomosing with *C* and connected with  $SC^{3-4}$ ; fovea wanting; light cream-buff, with irregular dark irroration; costal margin more strongly dotted; markings brown, irrorated with black; antemedian line before one-third, thick at costa, then interrupted outward and weaker, thickened into an inwardly oblique band (approaching a width of 1 mm.) from *M* to hind margin; cell-dot quite small, but slightly longer than broad; median line indicated by a midcostal spot; postmedian from nearly three-fourths costa, oblique inward at first, very weak from  $SC^5$  to  $R^2$ , thence oblique inward to fold and accompanied distally by an irregular band, which is nearly 1.5 mm. wide at first but narrows behind  $M^1$ , finally about vertical (slightly excurved) to hind margin at nearly two-thirds, the accompanying band tapering; a terminal blotch between the radials (but not reaching  $R^3$ ), almost confluent posteriorly with the anterior edge of the postmedian band; a smaller and weaker blotch between the medians; much slighter dark shading indicates the distal boundary of the scarcely traceable pale subterminal line; termen with dark interneural dots; fringe dark-marked (defective). *Hind wing* with termen only very weakly projecting at  $R^3$ , very slightly indented before and behind the projection; *C* closely approximated to *SC* for a considerable distance; colour of fore wing; markings almost obsolete, the beginnings of two or three fine dark lines showing at abdominal margin; termen with dark interneural dots.

Fore wing beneath with the markings showing through, more suffused.

Natal: Umkomaas, 25 December 1914. Type in coll. Janse.

I am not satisfied as to the generic position of this very distinct species; the forward position of the veins which I have called  $SC^3$  and  $SC^4$  suggests that the former may really be  $SC^2$  (arising out of  $SC^1$  and anastomosing), in which case  $SC^{3,4}$  would be coincident.

45. *Macaria dolichostigma* sp. nov.

♂, 26 mm. Face with small projecting cone of scales; brown. Palpus fully  $1\frac{1}{2}$ , 3rd joint distinct, though short; brown, pale-mixed at base. Antenna slightly dentate, with cilia somewhat over 1. Crown darkened, only narrowly pale between antennae. Thorax and abdomen grey, paler beneath. Tibiae and tarsi infuscated; hind tibia not dilated.

*Fore wing* with fovea not strong;  $SC^{1,2}$  coincident, free; white, with some fuscous irroration; costal edge with some dark dots; base slightly clouded; lines dark fuscous; antemedian from beyond one-fourth costa, bent in cell, oblique inward to one-fourth hind margin, slightly sinuate inward behind cell; cell-mark black, elongate, almost as in *semitecta* Walk.; median shade moderately developed, not thick, placed just beyond cell-mark, very faintly curved outward anteriorly and inward posteriorly; postmedian from two-thirds costa, somewhat oblique outward, bent or curved before  $R^1$ , then straightish, slightly more oblique than termen, to five-eighths hind margin; its anterior extremity weak or interrupted, its posterior somewhat thickened; irregular cloudings in distal area, leaving free a pale patch between apex and  $R^1$  and a sligher pale spot behind  $R^3$ ; a still darker, but ill-defined, narrow shade traversing this area, anteriorly near the postmedian line, but posteriorly running to tornus; an elongate dark mark from postmedian line across this narrow shade between  $R^3$  and  $M^1$ ; terminal line not very strong, thickened into stronger dark dots or dashes between the veins; fringe whitish, purest at base, vaguely intersected and opposite the veins less vaguely spotted with grey. *Hind wing* with the bend at  $R^3$  and the sinuosity before  $R^3$  only very slight; similar to fore wing but with the first line obsolete, cell-mark less long, median shade rather stronger, straight, continuing the postmedian of fore wing, postmedian more gently curved anteriorly.

Underside without antemedian line, the median of fore wing and the longitudinal marks between  $R^3$  and  $M^1$  less strong, the distal area with the transverse bands (from costa against postmedian to tornus) rather broad and well developed, the pale patches near the termen rather conspicuous on both wings, cut by dark vein-streaks; fringes more sharply spotted than above.

Pretoria, 28 February 1916. Type in coll. Janse.

A ♀ from the same locality, 8 April 1910, probably belongs here in spite of its considerably larger size (32 mm.) and more uniformly darkened distal area. It might conceivably, however, be a form of *grisescens* Prout. The ♂ of the new species differs from *grisescens*, as well as from *johnstoni* Butl. and *semitecta* Walk., in the more projecting antennal joints. These four species, together with *orthostates* Prout (*Nov. Zool.* xxii. 349) and perhaps a few others, seem to form a group intergrading between *Macaria* and *Discalma*—the latter probably a superfluous genus.

46. *Macaria costicommata* sp. nov.

♂, 21 mm. Face grey, strongly overlaid with ochreous brown. Palpus rather short; 1st joint grey, 2nd coloured like face. Vertex and base of antennal shaft grey with blackish dots; ciliation fully 1. Thorax violet-grey, beneath whiter. Abdomen more ochreous, dorsally with dark irroration, which on the first few segments condenses into weak paired spots. Fore and middle legs ochreous brown, on outer side pale grey; hind leg predominantly pale grey, on inner side irrorated with ochreous brown; hind tibia dilated.

*Fore wing* with termen moderately oblique, nearly smooth, with a very slight curve or bend (change of direction) in middle; subcostals somewhat crowded,  $SC^{1,2}$  apparently coincident and free; violet-grey (with the lens

appearing irrorated grey and whitish), slightly—in distal area strongly—shaded or suffused with ochreous brown; costal area somewhat lighter, but marked with a number of small black dashes; lines brown, mixed with black, arising from large, outwardly oblique spots, which are comma-shaped, or the first two rather more triangular; these three spots equidistant, rather nearer to one another than to base and apex, the lines nearly parallel with termen, but slightly sinuous, the postmedian much less black-mixed than the other two; a small cell-mark within the curve of the median line; a brown costal mark parallel with termen, indicating the proximal boundary of the (obsolete) subterminal; terminal dark line rather thick, interrupted by ochreous brown spots at the veins; fringe somewhat variegated, whitest between the veins. *Hind wing* with termen waved, at  $R^3$  bent or prominent; costal spots and first line wanting; median and postmedian more proximal than on fore wing, wavy, but taking a fairly direct course across the wing; an ill-defined sub-terminal ochreous-brown shade; termen and fringe as on fore wing.

Underside with the ground-colour whiter, but more suffused with ochreous, brightest on the veins and distally, particularly on the subterminal band of the hind wing; costal margin of fore wing lighter ochreous, the enlarged spots wanting; lines ochreous-brown, antemedian of fore wing almost obsolete; some ill-defined white subterminal spots (larger on hind wing), terminal line of both wings ochreous, without dark admixture.

Rhodesia: Umvuma, December 1918 (Carnegie). Type in coll. Janse.

Probably related to *tecnum* Prout, but more recalling the facies of an American than of any African *Macaria*.

#### 47. *Macaria maculosa anmodes* subsp. nov.

Distinguished from name-typical *maculosa* Warr. (*Nov. Zool.* vi. 306; Abyssinia to Unyoro and British East Africa, not known to me from further south than Kilimanjaro) by its strongly sandy-ochreous tone, which is nearly that of *natalensis* Warr.; much less marked with fuscous and blackish than the East African race.

N. Rhodesia, Nyassaland and Portuguese East Africa, the type ♂ from N.E. Rhodesia (Trenoweth) in coll. Transvaal Museum.

#### 48. *Gonodontis paliscia* sp. nov.

♂, 43 mm. Similar to a large dark *erebaria* Guen. (coloration of *Crocallis boisduwalaria* H. Luc.). Antennal pectinations longer (almost 5; in *erebaria* only about 3).

*Fore wing* with the angles in termen slighter; dark shade proximally to the antemedian rather better developed; a narrow dark shade just beyond the postmedian between  $SC^5$  and  $R^2$  (but not reaching either) and a second from behind  $M^2$  to near tornus. *Hind wing* with the cell-spot larger than in *erebaria* (above shadowy, beneath strong).

*Fore wing* beneath with the postmedian line better developed than in *erebaria*, the anterior narrow shade beyond it extended to apex, the posterior one wanting. *Hind wing* with the postmedian line strong and thick, lunulate-dentate, with a deep V-shaped angle inwards at the radial fold; some strong dark shades beyond, namely a small one at costa, a broader one (and broadening posteriorly) from  $SC^2$  to near  $R^3$  and a moderate one from  $M^2$  to abdominal margin close to tornus.

Cape Colony: Stellenbosch, 15 October 1916 (Brauns). Type in coll. Janse.

49. *Gonodontis homales* sp. nov.

♀, 44 mm. Head and body concolorous with wings, only the palpus and legs somewhat browner. Face prominent, sloping, with projecting tuft below. Palpus about 2.

*Fore wing* with apex acute, minutely produced, termen smooth, little oblique anteriorly, strongly curved about the radials so as to become rather strongly oblique; cell rather long,  $SC^1$  free,  $SC^2$  connected by a bar with  $SC^{3-4}$ ; very pale drab, scarcely irrorated except in costal and distal regions, where some weak grey irroration is noticeable, inclining to form minute strigulae at the costal edge; lines obsolete; a grey discal ring; a short blackish dash at costa 4 mm. from apex; some slight grey shading at distal margin towards apex, darkening into a blackish terminal dash at apex itself; fringe rather paler, in some lights showing a slight reddish tinge, at apex slightly darkened. *Hind wing* with termen weakly subcrenulate anteriorly, virtually smooth posteriorly; distally concolorous with fore wing, shading off to whitish proximally; a weak grey line beyond middle, somewhat accentuated on the veins; a fine whitish line at base of fringe.

Underside whiter in places, notably in posterior part of fore wing; costal markings of fore wing reproduced; a small cell-dot on hind wing.

Transvaal: Groenvlei, 4 January 1907. Type in coll. Janse.

Not so shaggy as typical *Gonodontis*. Perhaps akin to *stictoneura* Prout (*Ann. S. Afr. Mus.* xvii. 72) but broader, both wings with termen smoother, etc., etc.

50. *Eurythecodes niveifrons* sp. nov. (Pl. I, fig. 16).

♂, 32-34 mm. Face pure white, with a very narrow fuscous-mixed upper edge. Palpus light brown or fuscous. Vertex white; occiput light ochreous brown. Antennal shaft mixed with whitish above, pectinations light brown, of only moderate length and ceasing shortly beyond middle of antenna. Thorax light ochreous brown; abdomen paler, subdorsally whitish. Femora light brown; tibiae and tarsi whiter, sometimes irrorated with fuscous.

*Fore wing* with  $SC^1$  connected with  $C$  by an extremely short or rather short bar,  $SC^2$  free (not stalked with  $SC^1$  as is normal in the group); light ochreous brown, without dark irroration; cell-dot minute, darker and redder brown; antemedian line brown, rather fine and very feeble, obsolete costally, very gently and regularly excurved from  $SC$  at about one-third to hind margin beyond two-fifths; postmedian also brown, rather thicker and much more distinct, slightly pale-edged distally, gently incurved between  $SC^5$  near apex and hind margin rather near tornus, anteriorly oblique inward (though less strongly than in *flavedinaria* Guen.) and reddened; a small white subcostal mark just beyond; no terminal line; fringe concolorous. *Hind wing* only feebly bent at  $R^3$ ; paler, especially anteriorly and proximally; almost unmarked; posteriorly with faint indication of a straightish postmedian line, at abdominal margin placed at about two-thirds, but receding from termen anteriorly.

Underside more uniformly coloured, the fore wing being paler than above (especially posteriorly), the hind wing less pale than above; almost unmarked, the fore wing with weak indications of the postmedian line, at least anteriorly.

Pretoria North (C. J. Swierstra), 30 March 1917, type in coll. Transvaal Museum; 15 December 1916, paratype in coll. L. B. Prout.

Except in the non-stalking of the first two subcostals of the fore wing, this species agrees pretty accurately in structure with *Eurythecodes*, but whether that genus should sink to *Epigynopteryx* or *Psilocerea* I am not yet prepared to say.

51. *Eurythecodes ommatoclesis* sp. nov.

♀, 33 mm. Head and body concolorous with wings, the occiput a little darker than vertex and antennal shaft, the palpus paler beneath than above. Palpus short, terminal joint minute, concealed. Antennal pectinations 3 or 4.

*Fore wing* broad, costa strongly arched before apex, apex minutely falcate, termen slightly sinuate in anterior half;  $SC^2$  anastomosing shortly with  $SC^{3-4}$ ; fawn-colour, shaded with vandyke brown, palest in proximal part, especially costally; a few scattered dark specks; first line slender and indistinct, oblique outward from one-fourth costa, acutely angled subcostally, then about parallel with termen; median line thick and distinct, from mid-costa, very slightly curved to before middle of hind margin; a narrow, slightly dark-ringed white cell-mark just proximal to median line; a rather broad but not sharply defined dark shade midway between this and termen, bounded on its proximal side by a row of blackish vein-dots (the postmedian); a whitish apical dot, behind which runs an oblique, curved black mark from termen to  $R^1$ ; terminal region narrowly pale posteriorly; fringe darker. *Hind wing* with termen smooth, anal angle pronounced; as fore wing, but with no antemedian line or apical and subapical marks; median line placed at about one-third, the cell-mark beyond it; postmedian dots scarcely beyond middle of wing.

Underside more speckled, the cell-marks ringed with black, antemedian line wanting, median slight, postmedian dots larger and deeper than above, apical markings of fore wing present.

Natal: New Hanover, 26 December 1915. Type in coll. A. J. T. Janse.

A ♂ from Pinetown, 18 December 1908 (G. F. Leigh), subsequently submitted by the Transvaal Museum, is rather smaller (29 mm.), pectinations longer, termen rather less sinuate, median line still darker, cell-spot of hind wing more broadly edged with black.

In all the tropical material in *Eurythecodes* which I have yet examined,  $SC^2$  is either free from  $SC^{3-4}$  or connected by a bar, but occasional anastomosis, as in *ommatoclesis*, will probably be found and in any case the variation is not generic.

52. *Omiszodes complanata* sp. nov. (Pl. I, fig. 15).

♀, 47 mm. Close to *ocellata* Warr., differing as follows.

Wings rather less broad, smoother, without the irregular dark spots and mottlings. *Fore wing* with the cell rather less long; cell-spot smaller; antemedian line of spots gently curved, not—as in *ocellata*—acutely angulated outward in cell; fringe paler, distally almost white. *Hind wing* more uniform, being anteriorly less light yellow; cell-mark very feeble, apparently not ocellated. Underside more reddish than in *ocellata*, with similar distinctions to those of upperside.

Pretoria North, 15 December 1916 (C. J. Swierstra). Type in coll. Transvaal Museum.

In some respects somewhat intermediate towards *terinata* Feld.

53. *Pareclipsis phaeopis* sp. nov. (Pl. I, fig. 13).

♂, 40 mm. Head and body concolorous with wings. Palpus scarcely reaching beyond frons. Antenna almost simple—somewhat lamellate and pubescent; above greyish, beneath ferruginous.

*Fore wing* with  $SC^1$  free,  $SC^{2-3}$  stalked,  $SC^3$  anastomosing with  $SC^4$ ; apex slightly prominent, termen markedly bent in middle; wood-brown, strongly irrorated and clouded with fawn-colour (least so in distal area), the whole proximal area and a narrow distal border with plumbeous suffusion; lines

marked by plumbeous shading, blackish dots on the veins and sometimes whitish irroration arranged in dentate form; antemedian at about one-fourth or beyond, sometimes lost in the proximal suffusion; postmedian about 3 mm. from termen, fairly direct; a diffuse fawn-coloured, slightly dark-pupilled cell-spot. *Hind wing* somewhat paler, the suffusions rather less strong, more evenly distributed; cell-spot weak or obsolete; no antemedian line; postmedian indicated by slight plumbeous shading and (sometimes very weak) dark vein-dots; fringe concolorous with that of fore wing.

Underside tolerably evenly suffused, the costal edge of the fore wing browner, the inner-marginal part of hind wing with hoary admixture; both wings with cell-spot brown, very variable in expression, postmedian dots well-developed.

Cape Town, May 1912 (Lord Gladstone). Type in coll. Transvaal Museum, paratype in coll. L. B. Prout.

Evidently a variable species. The only known ♀ (data as above) is larger (46 mm.), the fore wing—as is frequent in the group—more angular, this wing much clearer brown, the other shades being largely suppressed.

54. *Obolcola petronaria* ab. *aliena* ab. nov. (Pl. I, fig. 3).

♂, ♀. Thorax and abdomen above violet-grey, the abdomen with ill-defined browner belts.

*Fore wing* above violet-grey (about as in the small patch just outside the postmedian in normal *petronaria*), only the costal edge narrowly of the normal colour; median area very strongly suffused with brown (of nearly the shade of the discal ocellus, which is consequently very indistinct); this shade just crossing the antemedian and postmedian lines; lines not strong, except sometimes their black costal extremities; weak distal shading, about as in normal forms. *Hind wing* violet-grey, the brown shading only developed in narrow bands or lines accompanying the median and postmedian; cell-dot wanting.

Fore wing beneath suffused with violet-grey, but with a broader costal area above remaining brownish ochreous; markings indistinct or wanting. Hind wing remaining pale brownish ochreous, but more or less heavily irrorated with violet-grey; almost unmarked or with a strong antemedian line.

Pretoria North, 13 March 1917 (C. J. Swierstra). Type ♂ in coll. Transvaal Museum. Pretoria, 10 February 1917 (H. G. Breijer). Allotype in coll. L. B. Prout.

A striking form, giving the impression of a separate species. I can, however, find no essential difference, unless it be in the well-developed abdominal spine; this is undiscoverable in most of the ♂ *petronaria* which I can examine, but must surely be present, as the tibial hair-pencil is so strong.

55. *Rhodophthitus atacta* sp. nov.

♂, 39 mm. Similar to *Nothabraxas commaculata* Warr., differing as follows.

Face without the horny process of *Nothabraxas*; predominantly pale ochreous, only at the sides fuscous. Palpus apparently rather shorter; less black-mixed proximally. Front of thorax more ochreous.

*Fore wing* slightly less elongate, the termen being rather more rounded and a little less oblique; rather less glossy, the black parts less pure, being more tinged with purplish and in places dotted with white; the black at costal margin rather more extended and more evenly distributed, but in the form of dots and irroration rather than well-defined spots; antemedian black band wanting in cell, a continuous longitudinal white band consequently running from base to subapical fascia; the latter narrow; nearly the entire hind-marginal

and distal area black, the interrupted curved white fascia which in *N. commaculata* runs from apex to tornus being only developed in its anterior part and even here sprinkled with black. *Hind wing* white, not tinged with straw-colour; the cell-spot, which is generally wanting in ♂♂ of *N. commaculata*, well developed; postmedian line of spots more distally placed, about 3 mm. from termen; a terminal line of black spots, confluent almost throughout; fringe predominantly grey, only mixed with white at ends of some of the veins and the fold.

Bechuanaland: Gaberones, 6 November 1917 (Jones). Type in coll. Janse.

A slightly larger ♂ from Potgieters Rust, Transvaal, November 1919 (G. M. Melle), in coll. South African Museum, shows on the fore wing a narrow remnant of a white streak from near tornus to  $R^3$  anteriorly curving away from apex, rather than (as in *N. commaculata*) towards it.

In *Nov. Zool.* xxii. 367 I used the name *Nothabraxas* (= *Hameopsis* Butl.) too comprehensively; it must be restricted to the few species with the horny plate above the face—curiously overlooked in Warren's generic diagnosis. These are *commaculata* Warr., *rudicornis* Butl. and one or two as yet undescribed.

56. *Zamarada consecuta* sp. nov. (Pl. I, fig. 22).

♂, 27 mm.; ♀, 31 mm. Nearly related to *secutaria* Guen. (= *pulverosa* Warr.). *Hind tibia* of ♂ not appreciably dilated, hind tarsus almost as long as tibia, the spinules conspicuous. Thorax and abdomen dorsally darker than in *secutaria*, the abdomen with black anterior belt and ill-defined black posterior cloudings (from about the 4th somite to the 7th).

*Fove wing*, at least in the ♂, rather narrower, termen rather more oblique; irroration and markings blacker, giving to the whole insect a more sombre appearance; cell-mark narrower, not pale centred; postmedian line with much shallower sinus between  $R^3$  and  $M^2$  and not fully resuming its vertical direction posteriorly; dark radial shade strongly developed in distal area and even suggested between postmedian and cell. *Hind wing* and underside with corresponding distinctions, the distal area beneath of an almost uniform black-grey.

Transvaal: Barberton, 19–26 March 1920 (A. Roberts, G. v. D.), type ♂ in coll. Transvaal Museum; Pretoria, August 1913 (Lord Gladstone), ♀ in coll. L. B. Prout.

This may have been overlooked as a form of the common and rather variable *secutaria*. I think the antennal pectinations of the ♀ are slightly shorter, but they are pressed against the shaft in a manner that makes exact judgment very difficult. It is probable that the unnamed species from Machakos, British East Africa, which Hampson (*Trans. Zool. Soc. Lond.* xix. 123, t. 4, f. 51) records as *Z. phaeozona* "subsp." is a race of *consecuta*, much less dark and without the dark dorsal maculation of the abdomen.

57. *Zamarada ilma* sp. nov. (Pl. I, fig. 6).

♂, 18 mm. Still closer to *secutaria* Guen., agreeing almost exactly in shape and markings, but with more nearly the coloration of *consecuta*. Distinguished by its very small size and somewhat olivaceous tone. Vertex and thorax above pale olive-grey, metathorax with some black, partly lustrous dots. Abdomen above light ochreous brown, with some white admixture on central ridge and with the crests blackish; anal tufts rather long. *Hind tibia* even more strongly dilated than in *secutaria*, whitish, with slightly browner hair-pencil; hind tarsus abbreviated (less than two-thirds tibia), the spinules concealed.

*Fore wing* with basal area less reddish than in the allies, with a black spot at base of cell and rather thick black boundary-line, narrowed or somewhat interrupted at  $M$ ; cell-ring longer (reaching base of  $R^3-M^1$ ) and less broad, its pale centre larger; median shade ill-defined; postmedian accompanied distally by lustrous scaling, intermediate between those of *secutaria* and *metallicata* Warr.; prevailing tone of distal area pale olive-grey; some black-grey spots at costa, between the radials and at hind margin immediately beyond the postmedian, succeeded by narrow red-brown scaling or ill-defined spots; further black-grey spots at costa midway between postmedian and termen (representing confluence of the first three subterminal teeth) and about  $R^2$  from the red-brown shade almost to termen. *Hind wing* with median shade blackish and thick at abdominal margin, otherwise obsolescent; the black-grey and red-brown shades distally to the postmedian more continuous than on fore wing, the former also broader; terminal area more dark-mixed, at least in anterior half, pale subterminal line indicated, mixed with some lustrous scales.

Underside with cell-spots and distal area blackish.

Portuguese East Africa: Magude, November 1918 (C. J. Swierstra). Type in coll. Transvaal Museum.

58. *Zamarada opposita* sp. nov. (Pl. I, fig. 23).

♂, 16 mm.; ♀, 19 mm. Again close to *secutaria* (hind legs of ♂ lost). In coloration nearest to the darkest *secutaria*, but with stronger blackish raised spots (mixed with metallic scales) on metathorax and anterior part of abdomen—on the latter tending to form transverse bands—less strong irroration in the median area of both wings and some strong dark cloudings in the distal area. ♀ antennal pectinations fully as long as in *secutaria*.

*Fore wing* with well-defined basal patch, its boundary-line little darker; cell-spot formed as in *ilma*, but predominantly black, only with a few pale and metallic scales; median line obsolete, except for a costal spot close to the cell-spot; distal area rather broader than in average *secutaria*, the sinus between  $R^3$  and  $M^2$  about as deep as in that species but slightly different in shape, the postmedian line projecting more at  $M^2$ , almost right-angled; distal area reddish brown, with ill-defined black clouding in anterior part (weakest apically), reaching to  $R^3$ , and an ill-defined oblique black bar from hind margin close to tornus to  $M^2$  at the sinus of the postmedian. *Hind wing* with the distal area rather broader, less strongly but more uniformly dark-clouded, the sinus of the postmedian much weaker.

Underside with the distal area uniformly blackish.

Transvaal: Woodbush Village, April 1915 (C. J. Swierstra), type ♂ in coll. Transvaal Museum; Pretoria, 13 February 1916 (A. J. T. Janse), ♀ in coll. Janse.

The pale parts of the distal area in the ♀ are slightly more olivaceous than in the ♂, and this fact, together with the small size and a few other points of similarity, suggest a possibility (not probability) that this may be a form of *ilma*.

59. *Zamarada denticatella* sp. nov.

♂, 26 mm. Head and body light ochreous brown, the face, the proximal part of antennal shaft and the upper and inner side of fore leg (especially coxa and femur) with rather strong black irroration, the body above with less copious and less black irroration; abdomen with two or three ill-defined purplish dorsal spots. Hind tibia strongly dilated in proximal part, tapering gradually from the region of the proximal spurs distad.



*Fore wing* hyaline, the slight scaling pale ochreous brown, with scarcely any green reflections, the dark irroration (strigulation) slight or moderate; costal margin more opaquely scaled, more ochreous, rather strongly speckled; cell-dot black, minute; a fine black line at about four-fifths, running from  $SC^4$  to hind margin, slightly dentate inward on the veins and lunulate outward between them, weakly excurved between  $R^3$  and  $M^2$ ; an interrupted metallic line at the distal edge of this, then a lilac-grey shade, then a series of triangular interneural tawny spots, marking the proximal edge of the obsolete subterminal line; terminal area pale ochreous or ochreous-grey, marked with some dark-grey strigulae; terminal line brighter ochreous, somewhat interrupted; fringe pale ochreous, with a few feeble dark interneural spots proximally. *Hind wing* similar, except costally.

Underside with more violet reflections; cell-dots present; the entire distal area from the line (which is not differentiated in colour) to the termen uniform dark grey-brown; fringes pale.

South Rhodesia: Salisbury, 29 November 1917 (Father J. O'Neil). Type in coll. Janse.

Hampson (*Proc. Zool. Soc. Lond.* 1910, p. 470) identifies a ♂ from N.E. Rhodesia as *flavicaput* Warr. and I have also before me two ♂♂ from Bingongo, Bihé, Angola (Coll. Tring. Mus.), but although Warren's type of *flavicaput* (*Nov. Zool.* VIII. 212), also from Angola, is a ♀ I cannot believe that the two are conspecific; sexual dimorphism is virtually negligible in this genus and *flavicaput* belongs to the greener section, with reddish borders. The new species is nearer to *chrysothyra* Hmps. in colouring, though rather paler, rather less broad-winged, termen of hind wing less full, distal black patches wanting, curves in postmedian much less deep.

60. *Heterostegane auranticollis* sp. nov. (Pl. I, fig. 7).

Head and antenna ochreous, mixed with orange. Collar and front of thorax deeper orange. Thorax and abdomen ochreous, paler beneath.

*Fore wing* fairly broad, apex not acute; pale ochreous, strongly irrorated with orange-ochreous and with scattered lustrous scales; costal margin bright deep orange to near apex; indications of straightish, extremely vague orange antemedian, median and postmedian lines; subterminal line rather darker, mixed with lustrous scales, running from four-fifths costa to tornus, the outward angle about  $R^2$  and the inward curve behind it (characteristic of many of the genus) just noticeable but very weak; no terminal line; fringe concolorous. *Hind wing* with termen less fully rounded than in *indulavia* Guen. (not or scarcely convex between  $SC^2$  and  $R^3$ );  $C$  anastomosing with  $SC$  at scarcely more than a point; concolorous with fore wing; antemedian line wanting; subterminal scarcely so well developed as on fore wing.

Underside slightly paler, fore wing more weakly marked, hind wing scarcely marked.

Moorddrift, 8 December 1914 (C. J. Swierstra). Type in coll. Transvaal Museum.

Unless this be a strongly orange-mixed aberration of *subrectistriga* Prout, with outer lines less straight than usual, it is clearly undescribed; the rather less pointed fore wing and shorter anastomosis of  $C$  of hind wing, in addition to the differences of colour and markings, induce me to regard it as new. The colour more approaches that of *aurantiaca* Warr. (*Nov. Zool.* I. 106), though not quite so bright.

## HEMIXESMA gen. nov.

Face not protuberant, moderately smooth-scaled. Palpus rather short, rough-scaled, terminal joint small, concealed. Tongue developed. Antenna in ♂ bipectinate, excepting a short apical portion. Pectus slightly hairy. Femora glabrous. Hind tibia with terminal spurs only. Wings smoothly scaled. Fore wing not broad, slightly arched at base and rather noticeably near apex, straight between, termen smooth, oblique, scarcely curved except posteriorly; fovea wanting; cell one-half or slightly over, *DC* very slightly curved; *SC*<sup>1, 2</sup> coincident, connected by a minute bar or point with *C* and with *SC*<sup>3-4</sup>, *R*<sup>1</sup> not stalked, *R*<sup>2</sup> from slightly before middle, *M*<sup>1</sup> approximated at origin to *R*<sup>3</sup>. Hind wing with costa rather elongate, apex rounded or slightly cut away, termen rather prominent behind *SC*<sup>2</sup>, smooth and not very strongly convex; cell one-half, *DC* rather oblique posteriorly, *C* approximated to *SC* to middle of cell, moderately rapidly diverging, *SC*<sup>2</sup> almost connate, *R*<sup>2</sup> wanting, *M*<sup>1</sup> well separate.

Type of the genus: *Hemixesma anthocrenias* sp. nov.

Possibly derived from *Lomographa* Hb. (in sensu Meyr.) = *Stegania* Dup., agreeing with Meyrick's characterization (*Tr. Ent. Soc. Lond.* 1892, p. 110) except in the absence of the median spurs of the hind tibia, but with longer wings and more the facies of *Aspitates*, or particularly of *Rhodometra antophilalaria* Hb. "*Aspitates*" *illepidata* Walk. (= *maeviaria* part. Walk., nec Guen.) may possibly have to be transferred here, but unfortunately both the specimens before me have lost the hind legs; ♂ antenna with two pairs of pectinations to each joint, *SC*<sup>1, 2</sup> not connected with *C*, *R*<sup>2</sup> virtually central; larger than *anthocrenias*, hind wing well marked.

61. *Hemixesma anthocrenias* sp. nov.

♂, 29 mm. Head and body stramineous, the lower part of face and upper-side of palpus more ochreous, the abdomen more whitish, fore femur and fore tibia darkened.

*Fore wing* light straw-colour, with darker irroration (strongest at costal edge); a very small black cell-dot; a thick brown (at distal edge black) postmedian line from four-fifths costa, almost parallel with termen to *R*<sup>1</sup>, then curving very gently to become slightly more oblique, terminating rather abruptly before *SM*<sup>2</sup>; fringe paler. *Hind wing* white, weakly irrorated distally, otherwise clear.

Fore wing beneath pale straw-colour, becoming whitish posteriorly; in and before cell somewhat infuscated; postmedian line well developed anteriorly, becoming shadowy. Hind wing more irrorated than above.

Bloemfontein, November 1918 (Irving). Type in coll. Janse. A smaller (26 mm.), scarcely irrorated ♂ from Middelburg, Cape Colony, 15 October 1916 (Brain) in coll. L. B. Prout, kindly presented by Mr Janse.

62. *Cabera neodora* sp. nov.

♂, 25 mm. Face and palpus reddish brown-grey; palpus somewhat up-curved, over 1, second joint rather heavily scaled. Vertex whitish grey. Thorax and abdomen grey, more whitish beneath.

*Fore wing* with costa straight except at base and near apex, apex moderate, termen moderately oblique, very slightly curved anteriorly, rather more so posteriorly; cell slightly over one-half, *SC*<sup>1</sup> well free; light ochreous grey, with faint suffusions of colder grey and with some scattered black scales; a minute black cell-dot; a few transversely arranged red scales perhaps indicating the

position of median line; an irregular band of black spots placed about 2 mm. from termen, distally edged with whitish and proximally more broadly with red, almost obsolete between the radials except for some red proximal irroration; distal area with some very slight red irroration; termen with distinct black interneural dots or dashes. *Hind wing* with  $SC^2$  arising at least as far from end of cell as  $M^1$ ; similar to fore wing, the black spots of the postmedian rather weaker, in the middle of the wing rather farther from termen.

Underside slightly paler, unless at costal margin of fore wing; unmarked except for the cell-dots and terminal dots; the latter less sharp than above, slightly connected by a dark grey line.

Port Elizabeth, 15 November 1916 (Fitz Simons). Type in coll. Janse.

Very distinct from any hitherto known African species, strongly suggestive of the Australian *Casbia lithodora* Meyr. This is the first African species recorded under *Cabera* (= *Deilinia*), but *strigata* Warr. and *pseudognophos* Prout (*Ann. S. Afr. Mus.* xvii. 74) should be placed here according to Snellen's differentiation (*Tijd. Ent.* xliii. 258) and it now seems to me not unlikely that my *Gyalomia* is only a superficial modification of the same.

## B. NOCTUIDAE. By A. E. PROUT

### SUB-FAMILY ERASTRIANAE

#### PAGETIA gen. nov.

Proboscis aborted, slender; palpus obliquely porrect, more than  $1\frac{1}{2}$  diameter of eye, the second joint rather thickly scaled above, the third very short; frons smooth; antenna of ♂ ciliate; thorax clothed almost entirely with scales; tibiae moderately hairy; abdomen with small crest on first basal segment. Fore wing with the apex rounded, the termen evenly curved, non-crenulate,  $SC^2$ ,  $SC^3$ ,  $SC^4$  and  $SC^5$  stalked,  $SC^5$  arising before  $SC^2$ . Hind wing rather narrow, rounded, non-crenulate;  $SC^2$  and  $R^1$ ,  $R^3$  and  $M^1$  shortly stalked;  $R^2$  nearly fully developed, from well behind middle of discocellulars. Nearest to *Eublemmistis* Hmps. by the key in *Cat. Lep. Phal.* vol. x., but superficially more resembles the genus *Eublemma*, from which, however, it is separated by the neuration and the aborted proboscis as well as by some minor characters.

#### 1. *Pagetia larentiodes* sp. nov. (Pl. I, fig. 26).

♂, 17–20 mm. Head, thorax above, palpus and antennal shaft ochreous-brown; abdomen above cinereous; pectus, legs and abdomen beneath whitish, the fore tibia spotted with ochreous, the fore and mid tarsi broadly banded with fuscous.

Fore wing whitish, tinged with ochreous and more or less irrorated with fuscous, especially at base and on the medial band; the lines blackish. Sub-basal line bent out behind costa and angled in on  $M$  and to hind margin; a broad ochreous shade between subbasal and antemedial lines; antemedial line waved and slightly oblique, strongly angled outward on  $SC$  and  $M$  and to hind margin and inward on  $SM^2$ ; a black discal spot surrounded by a black ring; medial band ochreous, irrorated with fuscous; postmedial line waved, dentate on the veins, outwardly oblique from costa to  $R^3$ , inwardly oblique to fold, strongly angled outward on  $SM^2$  and bent in to hind margin near tornus; an ochreous patch on and behind costa between postmedial and subterminal lines; subterminal line whitish, defined by blackish teeth at  $C$  and on  $SC^5$  and by slighter fuscous shading between  $R^2$  and  $M^1$  (in some specimens

this dark shading is more continuous); a slight dark shade on termen from  $SC^5$  to  $R^3$ ; a fine black terminal line, thickened into spots between the veins; fringe ochreous, irregularly chequered with blackish.

Hind wing whitish, tinged with ochreous-grey, slightly darkened on the veins and at termen. Slight indications of white postmedial and subterminal lines on posterior third of wing, defined by slight dark marks on abdominal margin; fringe ochreous-white.

Underside of both wings ochreous-white, sparsely irrorated with fuscous (the fore wing more strongly irrorated behind costa, on termen and on medial area); costa of fore wing ochreous with some black irroration; fringes ochreous-white.

Pretoria, 1 December 1911 (Capt. Paget), type; North Pretoria, 14 February 1917 (C. J. Swierstra), one ♂. Also two ♂♂, paratypes, in coll. Joicey, presented by the Transvaal Museum, Pretoria, 16 December 1912 (C. J. Swierstra), Pretoria North, 19 December 1916 (C. J. Swierstra). A ♂ in coll. Joicey, from Zomba, Nyassaland, April 1920 (H. Barlow), almost certainly belonging to this species, is much greyer, without the ochreous shades; not improbably a subspecies.

#### SUB-FAMILY OPHIDERINAE (= Noctuidae, Hmps.)

##### 2. *Egnasia lioperas* sp. nov. (Pl. I, fig. 10).

♀, 32 mm. Palpus, antenna, thorax and abdomen above pale brownish-ochreous, the palpus irrorated with black and white, abdomen with the segments tipped with whitish; head, pectus, legs and abdomen beneath white, the tibiae and tarsi tinged with pale ochreous.

Fore wing pale, glossy, brownish-ochreous, the costa irrorated with blackish, the termen broadly tinged with reddish brown. A slight pale lunule on the discocellulars; an indistinct postmedial line dividing the brownish terminal shade from the ochreous ground-colour; from costa beyond two-thirds, keeping nearly parallel with termen but somewhat excurved from costa to  $M^1$ , thence slightly undulate; other lines obsolete; fringe violet-white, marked with blackish at middle and tip.

Hind wing a shade paler and greyer than fore wing, but repeating the same scheme of colouring and design; discal spot rounder, almost obsolete, placed on a slight grey medial shade; postmedial line very slight and fine, nearly following the curve of the termen, but a little undulate; fringe as on fore wing.

Fore wing beneath pale greyish-ochreous with the costa to postmedial line violet-white, the hind margin broadly whiter, stigmata white outlined with reddish-brown, the orbicular an oblique oval, the reniform lunulate, with its distal edge slightly angled inward at middle; a slight brown medial line, outwardly oblique from near middle of costa and excurved round reniform; postmedial line as above but more sharply defined, reddish-brown, with a broad, red-brown distal shade on anterior half; fringe as above. Hind wing pale greyish-ochreous, with the costa and termen (except behind  $M^2$ ) violet-white irrorated with fuscous; the abdominal margin behind fold white. Repeats the pattern of fore wing, with the exception of the orbicular; the discal lunule cut at the middle, with the lower lobe larger than on fore wing; postmedial line minutely dentate, angled out behind  $R^1$ .

Pretoria, 26 February 1919 (C. J. Swierstra), one ♀.

One worn ♀ in coll. British Museum (also from Pretoria), placed in the series of *E. vicaria* Wlkr. appears to belong to this species, which is at once distinguishable from *vicaria* by the more nearly evenly curved distal margin

of fore wing and the non-angulate distal margin of hind wing, as well as by the more glossy texture and reduction of the markings on upper surface. The spurs on the hind tibia seem unusually short for this genus, but this is probably simply a sectional difference. In other points *lioperas* seems to agree exactly in structure with the genus *Egnasia*.

3. *Antarchaea carnea* sp. nov. (Pl. I, fig. 27).

♀, 34 mm. Head, thorax, abdomen, legs and 1st joint of palpus (2nd and 3rd joints are missing) pale ochreous tinged in parts with pinkish; the tegulae broadly tipped with grey; fore and mid tibia irrorated with brick-red on the outer side; tarsi (except at the tips of the joints) irrorated with greyish, the hind tarsus being paler than the others.

Fore wing above nearly uniformly suffused with pinkish, more ochreous on the veins and at base; the costa narrowly tinged with reddish-orange. Faint traces of a double, outwardly oblique antemedial line, indicated chiefly by black spots behind costa, near base, and before hind margin at more than one-third; some black scales behind  $M^2$  at about three-fifths from base of wing, apparently forming part of a practically obsolete (? nearly erect) medial line; a few scattered black spots in place of postmedial and subterminal lines; a row of interneural black spots close to termen; fringe darker and browner than the wing.

Hind wing coloured as fore wing but with the anterior third and the abdominal margin almost without pink suffusion. A few scattered black spots; interneural spots as on fore wing; fringe a little darkened but pinkish.

Underside of both wings ochreous flushed with pink on distal third, especially towards apex, and with a crenulate dark terminal line; fringes pinkish with a fine pale line at base. Fore wing with the costa to near apex golden-yellow, more broadly towards apex.

Sandfontein, December 1911 (J. v. Niekerk), one ♀.

Might just possibly be a unicolorous ab. of *fragilis* Btlr., but the hind wing is much pinker (more as in *haematoessa* Hmps.) and what indication there is of the lines does not seem to agree with *fragilis*. The wings also seem slightly too broad for that species.

## EXPLANATION OF PLATE.

Fig.

1. *Chlorocoma clopia* Prout, sp. nov., ♂.
2. *Eupithecia laticallis* Prout, sp. nov., ♂.
3. *Obolcola petronaria* ab. *aliena* Prout, ab. nov., ♂.
4. *Eucymatoge pretoriana* Prout, sp. nov., ♂.
5. *Chionopora tarachodes* Prout, sp. nov., ♂.
6. *Zamarada ilma* Prout, sp. nov., ♂.
7. *Heterostegane auranticollis* Prout, sp. nov., ♀.
8. *Eupithecia infausta* Prout, sp. nov., ♂.
9. *Scopula impicta* Prout, sp. nov., ♂.
10. *Egnasia lioperas* A. E. Prout, sp. nov., ♀.
11. *Mictoschema swierstrai* Prout, sp. nov., ♂.
12. *Omphalucha indeflexa* Prout, sp. nov., ♂.
13. *Pareclipsis phaeopis* Prout, sp. nov., ♂.
14. *Boarmia breijeri* Prout, sp. nov., ♂.
15. *Omizodes complanata* Prout, sp. nov., ♀.
16. *Eurythecodes niveifrons* Prout, sp. nov., ♂.
17. *Ortholitha petrogenes* Prout, sp. nov., ♂.
18. *Metallochloa dyscheres* Prout, sp. nov., ♂.
19. *Boarmia gladstonei* Prout, sp. nov., ♂.
20. *Coenotephria respondens* Prout, sp. nov., ♂.
21. *Ptychopoda umbricosta* f. *ambiscripta* Prout, form. nov., ♀.
22. *Zamarada consecuta* Prout, sp. nov., ♂.
23. *Zamarada opposita* Prout, sp. nov., ♂.
24. *Ptychopoda basicostalis* ab. *particolor* Prout, ab. nov., ♂.
25. *Ptychopoda carneilinea* Prout, sp. nov., ♀.
26. *Pageia larentiodes* A. E. Prout, sp. nov., ♂.
27. *Antarchaea carnea* A. E. Prout, sp. nov., ♀.



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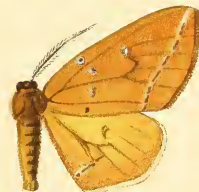
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